

# **EXHIBIT 17**

Page 231

1                   IN THE UNITED STATES DISTRICT COURT  
2                   FOR THE DISTRICT OF NEW JERSEY

3  
4           IN RE: JOHNSON & JOHNSON           )  
          TALCUM POWDER PRODUCTS           )  
5           MARKETING, SALES PRACTICES,    ) MDL NO. 16-2738(MAS)(RLS)  
          AND PRODUCTS LIABILITY           )  
6           LITIGATION,                        )  
          \_\_\_\_\_)

7  
8  
9  
10  
11  
12                   VIDEOCONFERENCE DEPOSITION  
13   OF  
14           DANIEL CLARKE-PEARSON, M.D. (VOLUME II)  
15                   (Taken virtually by Defendants)  
16                                   Friday, March 8, 2024

17  
18  
19  
20                   Reported by: Christine A. Taylor, RPR

21  
22  
23  
24                   GOLKOW LITIGATION SERVICES  
                  877.370.3377 ph | 917.591.5672 fax  
25                                   deps@golkow.com

1 THE WITNESS: Take a look at it and  
2 calculate for myself.

3 Sorry. I'm trying to find [REDACTED]  
4 [REDACTED] on my phone here.

5 BY MS. DAVIDSON:

6 Q. Dr. Clarke-Pearson, my question was not  
7 [REDACTED]. My question does this  
8 medical record [REDACTED]

9 MS. O'DELL: He will answer your  
10 question when he's ready to do so. Don't  
11 rush him, please.

12 MS. DAVIDSON: Oh, my God, Leigh.

13 THE WITNESS: I'm trying to see. It  
14 says [REDACTED] [REDACTED] is  
15 what it says.

16 BY MS. DAVIDSON:

17 Q. Is that inconsistent with your  
18 statement in the report that [REDACTED]  
19 [REDACTED]?

20 A. Yes.

21 Q. Is [REDACTED]?

22 A. Yes.

23 Q. Is this an error in your report?

24 A. That's why I want to calculate it. I  
25 may have calculated -- it may be an error in the

Page 388

1 Q. -- and talc?

2 MS. O'DELL: Object to form.

3 THE WITNESS: For ovarian cancer,  
4 you're specifically talking about?

5 BY MS. DAVIDSON:

6 Q. Yeah. That's --

7 A. Not that I recall.

8 Q. Are you planning to go back and -- are  
9 you planning to go back and clarify [REDACTED]

[REDACTED] [REDACTED]?

11 A. Yes, I have a note to myself to do  
12 that.

13 MS. DAVIDSON: Leigh, do you have any  
14 other questions?

15 MS. O'DELL: I have one question  
16 actually or two questions maybe. Are you  
17 finished?

18 MS. DAVIDSON: Go ahead.

19 FURTHER EXAMINATION

20 BY MS. O'DELL:

21 Q. Dr. Clarke-Pearson, did you review  
22 the -- you reviewed the Phung paper in preparation  
23 for your opinions in this case?

24 A. Yes.

25 Q. And does the Phung paper report on

# **EXHIBIT 18**

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY  
MDL-NO. 16-2738 (FLW) (LHG)

---

IN RE: JOHNSON & JOHNSON

TALCUM POWDER PRODUCTS  
MARKETING, SALES PRACTICES,  
AND PRODUCTS LIABILITY  
LITIGATION

---

ORAL DEPOSITION OF:

DANIEL L.  
CLARKE-PEARSON, MD

VOLUME 2

\* \* \* \*

FRIDAY, AUGUST 27, 2021

\* \* \* \*

MASTROIANNI & FORMAROLI, INC.

Certified Court Reporting & Videoconferencing

515 South White Horse Pike

Audubon, New Jersey 08106

856-546-1100

1 BY MS. BROWN:

2 Q. Is it possible in your view, based on  
3 your review of Ms. Converse's case, to identify how  
4 many other unknown causes of her ovarian cancer were  
5 at play in her development of clear cell cancer?

6 A. **Sorry, I didn't quite follow the**  
7 **question.**

8 Q. It's a long question.

9 Reorienting us to Ms. Converse, you  
10 identified talcum powder as a cause of her ovarian  
11 cancer, correct?

12 A. **Yes.**

13 Q. You identified [REDACTED]  
14 [REDACTED] as a cause of her ovarian cancer,  
15 correct?

16 A. **Yes.**

17 Q. You have identified one or more unknown  
18 factors as causes of her ovarian cancer, correct?

19 MS. THOMPSON: Objection.

20 THE WITNESS: Yes.

21 BY MS. BROWN:

22 Q. Is it possible for you to say how many  
23 unknown factors caused Ms. Converse's ovarian cancer?

24 MS. THOMPSON: Objection.

25 THE WITNESS: I would phrase it to say

1 the mutation, correct?

2 **A. She would have one of those mutations,**  
3 **yes.**

4 Q. Is there a mutation that you believe a  
5 woman could be born with that already gets her to the  
6 5 to 10?

7 Meaning, does science know of a  
8 mutation which a woman is born with that can already  
9 ensure that she's going to get ovarian cancer?

10 MS. THOMPSON: Objection.

11 THE WITNESS: No, I'm not aware of any  
12 of that.

13 BY MS. BROWN:

14 Q. We were talking hypothetically about  
15 Ms. Converse, but you would agree -- let's talk  
16 concrete, though, about her now.

17 You would agree talc is a cause,  
18 correct?

19 **A. Yes.**

20 Q. You would agree [REDACTED]

[REDACTED] is a cause?

22 **A. I think it's a possible cause.**

23 Q. And you would agree other -- another  
24 factor or another factors were a cause of her clear  
25 cell cancer?

1 increased risk of endometrioid cancer, correct?

2 **A. Correct. But** [REDACTED]

3 **[REDACTED].**

4 Q. That's according to your review of one  
5 record, right?

6 **A. Of the patient's medical --**

7 MS. THOMPSON: Objection.

8 THE WITNESS: Of the patient's medical  
9 records at the time of her surgery when she had her  
10 diagnosis made.

11 BY MS. BROWN:

12 Q. Did you consider medical records from  
13 [REDACTED] that report [REDACTED]?

14 **A. No, I didn't.**

15 Q. Did you consider her own self-report of  
16 [REDACTED]?

17 MS. THOMPSON: Objection.

18 THE WITNESS: And when did she say she  
19 had [REDACTED]?

20 BY MS. BROWN:

21 Q. In the five years prior to her  
22 diagnosis.

23 MS. THOMPSON: Objection.

24 THE WITNESS: Okay. So I'm sorry.

25 What's the question?

1 BY MS. BROWN:

2 Q. Did you consider that?

3 I mean she said [REDACTED]

4 [REDACTED].

5 A. I didn't consider that. I was relying  
6 on the data from IARC that said at the time of  
7 diagnosis, the patient's [REDACTED] was a risk  
8 factor.

9 Q. And what about data like we're looking  
10 at in Exhibit 37, did you consider this type of data  
11 from the Ovarian Cancer Association Consortium?

12 A. I think I did, but I was looking at it  
13 more from the point of view of a recent BMI.

14 Q. It doesn't really make sense, though,  
15 to you when you think about the mechanism by which  
16 obesity is thought to increase a woman's risk of  
17 ovarian cancer, it doesn't really make sense to you,  
18 does it, that you wouldn't look somewhat back in time  
19 to see what a woman's weight was leading up to  
20 diagnosis, right?

21 MS. THOMPSON: Objection.

22 THE WITNESS: What would -- I'm not  
23 sure I understand the mechanism you're talking about.

24 BY MS. BROWN:

25 Q. If obesity is what is putting somebody

1 (Recess is taken)

2 MS. BROWN: We're almost there.

3 THE WITNESS: Okay.

4 BY MS. BROWN:

5 Q. Welcome back, Doctor.

6 We're going to just finish up quickly  
7 with our discussion of Ms. Rausa.

8 Ms. Rausa, according to your expert  
9 report, had [REDACTED]

10 [REDACTED], correct?

11 A. Yes.

12 Q. And you would consider [REDACTED]

13 [REDACTED], correct?

14 A. Yes, I do.

15 Q. Do you believe that Ms. Rausa's [REDACTED]  
16 was a cause of her ovarian cancer?

17 A. I think it was a partial causative  
18 factor. A cause, not the cause.

19 Q. In terms of one of the causes of  
20 Ms. Rausa's ovarian cancer, do you identify [REDACTED]  
21 as one of the causes of Ms. Rausa's ovarian cancer?

22 A. Yes. I attributed it to her.

23 Q. And so in your report on page 17, you  
24 describe [REDACTED] as -- at the end -- I'm looking  
25 at the end of your report at page 17 in summary, you

1 exam, [REDACTED].

2 Do you see that?

3 **A. I was looking at the date. But yes, I**  
4 **do see that.**

5 Q. And this appears to be a medical record  
6 of Ms. Rausa's from April of 2018, correct?

7 **A. Yes, that's correct.**

8 Q. Okay.

9 **A. And I have that noted in my report.**

10 Q. And this is a report of [REDACTED]  
11 [REDACTED], right?

12 **A. [REDACTED]**  
13 **[REDACTED]. That's the technique.**

14 Q. I'm just looking at right under report  
15 it says [REDACTED].

16 **A. Okay. I see that. Yes.**

17 Q. And this is, of course, one of the  
18 medical records you considered in forming your  
19 opinion, correct?

20 **A. Yes. I referenced it, yes.**

21 Q. And under impression, number three, it  
22 states: [REDACTED]

23 [REDACTED].

24 Do you see that?

25 **A. Yes.**

1 Q. And the medical provider interpreting  
2 this examination writes: [REDACTED]

3 [REDACTED]  
4 [REDACTED]

5 Do you see that?

6 A. Yes, I do.

7 Q. Okay. Did you consider that in coming  
8 to the conclusion that Ms. Rausa didn't have  
9 [REDACTED]?

10 A. I'm sorry. Please say the question  
11 again.

12 Q. Sure.

13 The medical provider interpreting this  
14 examination of Ms. Rausa indicated that [REDACTED]

15 [REDACTED]  
16 [REDACTED], correct?

17 A. That's what he said it looked like.

18 Q. Did you review this report?

19 A. I reviewed this report and then I  
20 reviewed the rest of her story which proceeds very  
21 quickly to identify that [REDACTED]

22 [REDACTED].

23 Q. So this, you do not believe, is an  
24 indication that Ms. Rausa had [REDACTED]

25 [REDACTED]

1 Q. So did you consider the fact that  
2 Ms. Rausa [REDACTED] as a risk factor for her  
3 ovarian cancer?

4 MS. THOMPSON: Objection.

5 THE WITNESS: I hadn't really given  
6 that consideration, but now that you brought it to my  
7 attention, I think that would increase her risk a  
8 little bit, but predominantly because she was using  
9 talc.

10 BY MS. BROWN:

11 Q. So would you consider the fact that  
12 Ms. Rausa [REDACTED] to also be a cause of her ovarian  
13 cancer?

14 MS. THOMPSON: Objection.

15 THE WITNESS: Yes.

16 BY MS. BROWN:

17 Q. So in terms of the causes of Ms.  
18 Rausa's ovarian cancer, [REDACTED]  
19 and unknown factors all caused Ms. Rausa's ovarian  
20 cancer, correct?

21 A. All contributed to the outcome of  
22 ovarian cancer, yes.

23 Q. But each one of those factors, [REDACTED]  
[REDACTED] unknown and [REDACTED] were a cause of  
25 Ms. Rausa's ovarian cancer?

1 MS. THOMPSON: Objection.

2 THE WITNESS: Yes.

3 BY MS. BROWN:

4 Q. And in terms of the percentage that  
5 each of those factors contributed to cause  
6 Ms. Rausa's ovarian cancer, science doesn't allow us  
7 to know that sitting here today, is that fair?

8 A. We can't ascribe a weight, if you will,  
9 or a percentage risk to that.

10 Q. And in terms of which of those factors,  
11 [REDACTED], unknown or [REDACTED] started to  
12 create ovarian cancer first in terms of time, we also  
13 don't know that.

14 Is that fair?

15 A. That's fair. Or we don't know, to flip  
16 it around, to say we don't know when the last  
17 mutation occurred that then caused the cancer. We're  
18 going with 5 to 10 mutations, so we don't know which  
19 one came first, second, third, fourth and last.

20 Q. We do know, as it relates to talc, that  
21 whatever the date is Ms. Rausa had [REDACTED]  
22 [REDACTED], in your view, based on your understanding  
23 of how talc reaches the ovaries, it would not have  
24 continued to enter her body -- enter the pathway to  
25 her ovaries after [REDACTED], is that

1 correct?

2           **A.**           **That as well as [REDACTED] wouldn't have**  
3 **gone into her pelvis either after [REDACTED].**

4           **Q.**           Have you ever heard of a medicine  
5 called [REDACTED]?

6           **A.**           **Yes.**

7           **Q.**           What's that?

8           **A.**           **It's [REDACTED]**

9 **[REDACTED].**

10          **Q.**           And have you ever prescribed [REDACTED]?

11          **A.**           **Yes.**

12          **Q.**           Do you think it's a good medicine,  
13 works well?

14                       MS. THOMPSON: Objection.

15                       THE WITNESS: I think it's a good  
16 medicine for [REDACTED].

17 BY MS. BROWN:

18          **Q.**           Did you see in Ms. Rausa's records that  
19 she was prescribed [REDACTED]?

20          **A.**           **I did not.**

21          **Q.**           Did you know that [REDACTED] contains  
22 talc?

23          **A.**           **No, I didn't. But there are other**  
24 **things like soaps that contain talc. I presume she**  
25 **probably used [REDACTED] for [REDACTED]**

# **EXHIBIT 19**

**UNITED STATES DISTRICT COURT DISTRICT  
OF NEW JERSEY**

**IN RE JOHNSON & JOHNSON  
TALCUM POWDER PRODUCTS  
MARKETING, SALES PRACTICES, AND  
PRODUCTS LIABILITY LITIGATION**

**MDL NO. 16-2738 (MAS) (RLS)**

***THIS DOCUMENT RELATES TO:  
Bondurant v. Johnson & Johnson, et al.  
3:19-cv-14366***

**SECOND AMENDED RULE 26 EXPERT  
REPORT OF JUDITH WOLF, MD**

Date: May 28, 2024



Judith Wolf, MD

## **I. BIOGRAPHY AND QUALIFICATIONS**

I am a board certified gynecologic oncologist, a physician specializing in the care of women with cancer with more than thirty years experience. I attended medical school at Northeast Ohio Universities College of Medicine and then moved to Texas where I completed residency at the University of Texas San Antonio and fellowship at MD Anderson Cancer Center where I remained on faculty for more than twenty years as Professor in the Department of Gynecologic Oncology. My area of expertise is ovarian cancer - diagnosis, research, treatment, and patient advocacy.

I have authored or co-authored over 100 peer-reviewed research articles and was the principal investigator or co-investigator for eleven research grants related to gynecologic cancers. Additionally, I have served as the principal investigator, co-principal investigator, or collaborator on numerous protocols, and have presented at more than 50 conferences, as well as at numerous scientific exhibitions and seminars. The majority of these have dealt with some aspect of ovarian cancer.

My research began when I was a fellow in gynecologic oncology. In addition to two years of clinical training, I spent two years working in the lab and getting my master's degree in biomedical science from The University of Texas School of Biomedical Sciences in Houston. My research as a graduate student was in investigating targets for therapy in ovarian cancer. One of these led to a phase I Clinical trial for women with ovarian cancer using a targeted therapy. This trial was part of a larger National Cancer Institute (NCI) grant. After completing training, I maintained a research lab for over 10 years, investigating gene therapy for the treatment of both ovarian and cervical cancer. My laboratory research in ovarian cancer led to a Clinical trial of gene therapy for women with ovarian cancer. Being able to see the long road it takes to bring new therapies from the lab to clinic fostered my continued interest in clinical trials and led me to become involved in both investigator initiated and NCI cooperative group clinical trials - Phase II and III trials of new therapies for ovarian cancer.

Throughout my tenure as a Professor at MD Anderson Cancer Center, I was recruited to join the biomedical industry. It wasn't until 2014, when Vermillion, a diagnostic company, recruited me as a Chief Medical Officer that I felt compelled to make a change in my career path. By this point in time, I had cared for hundreds of women with ovarian cancer, and saw the devastation this disease causes, with little improvement in the overall prognosis in more than twenty years. Working with a diagnostic company, focused on the early detection of ovarian cancer, seemed to me to be another way I could work to make a difference. While at Vermillion, I co-authored several publications, helped the company gain FDA clearance for their second-generation multiprotein biomarker assay for ovarian cancer detection and was integral in the company obtaining a \$7.5 million dollar grant from the State of Texas for ovarian cancer detection.

After two years at Vermillion, I was recruited by another small start-up diagnostic company, ProvistaDx, as Chief Medical Officer. ProvistaDx was using similar multi-protein assays (like Vermillion) but combining them with antibodies to try to detect both breast and ovarian cancer early. While at ProvistaDx, we published several articles in the breast cancer detection area. This

effort included their first publication setting forth this combined technology for ovarian cancer detection.

Working in these diagnostic companies exposed me to some of the intricacies of working in the biomedical industry and research from the viewpoint of a publicly traded company (Vermillion) and a small private start-up (ProvistaDx). Additionally, I learned much about the regulation of the biomedical industry.

In mid-2018, I left my company position to have more time to focus on my volunteer and advocacy work for women's health with a large focus on ovarian cancer. In the mid-1990s, I became involved with raising awareness and educating women about ovarian cancer through my work with the National Ovarian Cancer Coalition (NOCC), serving as a medical board member and as a governing board member, a position I have held for more twenty years. NOCC's mission is to raise awareness and educate women and their families about ovarian cancer. Additionally, I combined my love of running and passion for ovarian cancer to organize a charity 5K walk/run to raise awareness and research money for the Blanton/Davis Ovarian Cancer Research Program at MD Anderson Cancer Center. This race has been going on now for more than twenty-five years and has raised millions of dollars for ovarian cancer research.

In 2014, I became a member of the board of the Society for Women's Health Research which is a national nonprofit dedicated to promoting research on biological differences in disease and improving women's health. Additionally, I began working with Health Volunteers Overseas. I have volunteered in Vietnam, Honduras and Haiti working with physicians in these countries to train them to be better able to care for women with gynecologic cancers. I have worked with HVO for the past year and a half and currently head a project that trains young surgeons in Nepal to care for women with ovarian, cervical and uterine cancers. Some of this work has been paused since early 2020 because of the COVID-19 pandemic.

I continue to practice medicine as a Gynecologic Oncologist, treating women with ovarian cancer and other gynecologic malignancies in numerous medical centers around the country. I am recruited on a regular basis to serve in communities which are lacking gynecologic oncology care.

## **II. METHODOLOGY**

I was asked to make a determination as to whether the genital use of talcum powder can cause ovarian cancer. I approached this issue in a similar way and with the same rigor that I would use in my professional practice, both clinically and in research. This is an exercise I have used regularly throughout my thirty plus year career. I reviewed extensive medical and scientific literature (including epidemiological, animal, mechanistic studies, and reviews on all relevant topics). I also researched publicly available information related to talcum powder products, their safety, and their association with ovarian cancer. Many of these sources were obtained through articles and references from my personal library of journals, textbooks, as well as PubMed searches on relevant topics. Additional relevant literature, documents, and testimony were provided by the attorneys working on this case. I also requested additional information on various relevant issues when appropriate.

In doing this research, I applied the same standards that I use in clinical medicine to consider the reliability and validity of the medical and scientific literature, assessing the evidence according to the strengths and weaknesses of the study under review. I considered an extensive body of relevant literature, without regard to the nature of the specific findings. I based the opinions provided in this report using a weight of the evidence methodology in the context of Bradford Hill concepts.

### III. OVERVIEW OF OVARIAN CANCER

Ovarian cancer is a group of malignancies that are believed to begin in ovarian or fallopian tube tissue. There are three groups of cancers based on the cell type from which they arise - germ cell, stromal, and epithelial cancers. Epithelial cancers (EOC) account for the vast majority of ovarian cancers (greater than 90%) and are further subdivided based on the microscopic characteristics of the cells. These subtypes include serous, endometrioid, clear cell, mucinous, undifferentiated or mixed. Of these, serous is by far the most common and accounts for 70% of EOC. Epithelial ovarian cancers are those that are associated with talcum powder products.

Epithelial carcinoma of the ovary, fallopian tube, and peritoneum are usually considered as a single entity due to their common clinical behavior, risk factors, and pathogenesis. Over the past decade, research has found that many serous carcinomas of the ovary may begin in the cells that line the distal portion of the fallopian tube. These cells then leak, drip, or “escape” from the tube and the ovary (which is next to the tube) or the peritoneum (the layer that lines the inside of the abdomen and pelvis). (Levanon 2008, Chen et al. 2017; Singh et al. 2016; Soong et al. 2018). Cancers that clinically appear to arise from the fallopian tube, ovary or peritoneum have the same microscopic appearance, pattern of spread (throughout the pelvis and abdomen), and response to treatment. This information is consistent with the role of talcum powder in cancer development.

Ovarian cancer is a relatively rare cancer. The American Cancer Society estimates in 2023, 19,710 new cases of ovarian cancer compared to 300,590 new cases of breast cancer.<sup>1</sup> There is no screening for ovarian cancer and symptoms are vague. This presentation leads to late diagnosis for more than 75% of patients. Because of these factors, ovarian cancer is the deadliest gynecologic malignancy in the U.S. Seventy to seventy-five percent of women with advanced stage EOC die from their disease, usually from bowel obstruction, following years of chemotherapy treatment.

The National Cancer Institute defines a risk factor as something that increases the chances of developing a disease. Associations can occur that are not actually linked with a disease. A causative risk factor is one that increases the chances of developing a disease by means of a known or predictable mechanism. In other words, it is more than a mere association. (Vineis 2017). As a physician, I use the terms risk factor and contributing cause interchangeably when the known or predictable mechanism for the effect is plausible.

The most significant risk factors associated with ovarian cancer are inherited susceptibility genes, primarily BRCA1, BRCA2, and the mismatch repair genes (associated with Lynch syndrome). BRCA mutations account for 75% of all hereditary ovarian cancers. A woman with BRCA1 gene

---

<sup>1</sup> <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2023/2023-cancer-facts-and-figures.pdf>.

mutation has a 39-46% lifetime risk of developing ovarian cancer; a woman with BRCA2 gene mutation has an 11-27% lifetime risk of developing ovarian cancer. (Ring et al. 2017). It is estimated that these hereditary gene mutations account for 10-15% of all ovarian cancer and 75% of all hereditary ovarian cancers. (Lancaster et al. 2015). It is important to distinguish these inherited gene mutations from induced mutations caused by inflammation or environmental insults. Women with a genetic predisposition to developing ovarian cancer are still subject to other environmental and reproductive risk factors.

In addition to talc and asbestos exposure, other risk factors that have been linked to EOC include increasing age, nulliparity, infertility, endometriosis, obesity, polycystic ovarian syndrome, use of an intrauterine device, history of pelvic inflammatory disease, and cigarette smoking (for mucinous carcinoma). Protective factors (associated with a decreased risk of EOC) include previous pregnancy, history of breastfeeding, oral contraceptives, and tubal ligation. (Hunn and Rodriguez 2012; Wu 2015; IOM 2016; Mallen, Townsend, and Tworoger 2018; Park et al. 2018; Gentry-Maharaj et al. 2018; Lheureux et al. 2019). It is important to note that risk factors can interact with each other or act independently. They can act in a cumulative, additive, and/or synergistic fashion. (Wu et al. 2018; Vitonis et al. 2011; e.g., Phung et al. 2022). For example, Phung et al. (2022) examined the effect of well-established ovarian cancer risk factors in women with and without endometriosis. The pooled analysis of 9 case-controlled studies in the Ovarian Cancer Association Consortium demonstrated that there was a greater increased risk of ovarian cancer with genital talc use in women with endometriosis (OR 1.38, 95% CI 1.04-1.84) versus those without endometriosis (OR 1.12, 95% CI 1.01-1.25).

Because cancer is not caused by a single genetic abnormality, ovarian cancer development is multifactorial. For example, not everyone who has an inherited BRCA mutation develops ovarian cancer, and not everyone who gets ovarian cancer has an inherited BRCA mutation. This was recognized as early as 1971 when Knudson published his “two-hit” hypothesis of carcinogenesis. (Knudson 1971).

Talcum powder dusting is often referred to as a “lifestyle factor”. There are no medical benefits; any risk, particularly a risk of something as devastating and deadly as ovarian cancer, is unacceptable. Because of this, I advise all my patients not to use talcum powder products or to stop using them if they are already doing so.

Most women with EOC present with pelvic or abdominal pain, bloating, and/or gastrointestinal symptoms. Diagnosis is based upon pathologic evaluation of tissue. Knowledge and evaluation of the pathology of ovarian cancer is part of every gynecologic oncologist’s training and experience. Staging is surgical. In a patient with advanced stage ovarian cancer (stage 3 and 4), the cancer is spread throughout the abdomen and pelvis with typically thousands of tumor nodules covering the surface of all internal organs, along with several liters of fluid containing cancer cells (ascites).

Treatment for ovarian cancer is a combination of surgery and chemotherapy. Most women with advanced disease obtain 1-2 years of remission after treatment, and then their cancer recurs. Once ovarian cancer recurs, it is not curable, and most patients spend the remainder of their life on chemotherapy in an attempt to extend their life spans and minimize their often severe symptoms.

#### IV. HISTORICAL BACKGROUND OF TALC

Johnson & Johnson's baby powder was introduced to consumers in 1894. (Gurowitz 2007).

In the late 1940s and early 1950s, there were numerous articles (including at least one from Johnson & Johnson's own lab) describing the inflammatory properties of talc when introduced into the peritoneal cavity experimentally or through surgical gloves and the relative safety of starch products in the same setting. (Eberl and George 1948; Graham and Jenkins 1952). In 1953, Johnson & Johnson submitted a patent application for a "non-irritating" starch-based dusting powder due to the severe postoperative complications and strong inflammatory reaction frequently caused by talc. (Caldwell et al. 1953). In 1967, the association between asbestos and ovarian cancer was reported (J. Graham and Graham 1967).

Henderson first identified talc particles deep in ovarian tissue in 1971. (Henderson et al. 1971). Dr. Woodruff and colleagues at Johns Hopkins began raising awareness regarding environmental toxins like talc as etiologic factors in the pathogenesis of ovarian cancer in the early 1970s. (Parmley and Woodruff 1974).

In 1979, Longo and Young cautioned the cosmetic industry regarding the dangers of talc in *The Lancet*: "Epidemiological, experimental, and clinical data seem to link asbestos and talc with ovarian cancer. Direct passage of talc or asbestos-contaminated talc through the female reproductive tract to the ovarian surface may play an aetiological role. Further systematic evaluation of talc and asbestos as ovarian carcinogens is needed. What is disturbing is that a consultant to the cosmetic industry feels that further research on the biological effects of talc 'merits little priority.'" (D. L. Longo and Young 1979). The first epidemiologic study on the association between talc and ovarian cancer was published in 1982. (Cramer et al. 1982).

Between 1992 and 1995, concerns were raised in the medical literature regarding risks, including ovarian cancer, of talc on condoms. (e.g., Kang, Griffin, and Ellis 1992; Kasper and Chandler 1995). In 1995, the condom industry voluntarily agreed to stop dusting condoms with talc due to ovarian cancer concerns. ("PCPC\_MDL00062175" 1999; McCullough 1996). Recommendations regarding the use of talcum powder on diaphragms were also discontinued in the late 1990s. In 1998, Janssen, a subsidiary of Johnson & Johnson, changed the warning on its All-Flex Diaphragm to state "Powders should not be used with the diaphragm."<sup>2</sup> Although the inflammatory properties of powder from surgical gloves were known for decades, the FDA only banned its use in 2016. (Federal Register / Vol. 81, No. 243).

#### V. EPIDEMIOLOGY

Since the early 1980's, there have been numerous epidemiological studies evaluating the risk of ovarian cancer with talcum powder usage. To the present time, there are over 25 case-control studies, three prospective cohort studies, two pooled analyses, and ten meta-analyses. I assessed all of these studies.

---

<sup>2</sup> Janssen sold the Ortho diaphragms beginning in the 1960s. The 1962 instructions stated, "Dust diaphragm when dry with talcum powder and return it to the original container." ("Pltf\_MISC\_00000272 (JANSSEN-000001-19)" 1962).

A case-control study is designed to help determine if an exposure is associated with an outcome, in this case ovarian cancer. First, researchers identify women with and without ovarian cancer - cases and controls. Then they look back in time to learn which subjects in each group had talcum powder exposure(s), comparing the frequency of the exposure in the case group to the control group.

A case-control study is always retrospective because it starts with an outcome then traces it back to investigate exposures. Advantages of case-control studies are that they are comparatively efficient, less expensive, and easier to perform. Potential weaknesses include selection bias, (because they are not randomized) and recall bias. Case-control studies are particularly appropriate for uncommon diseases, like ovarian cancer, in which a very large cohort would be required to accumulate enough cases for analysis. (Narod 2016).

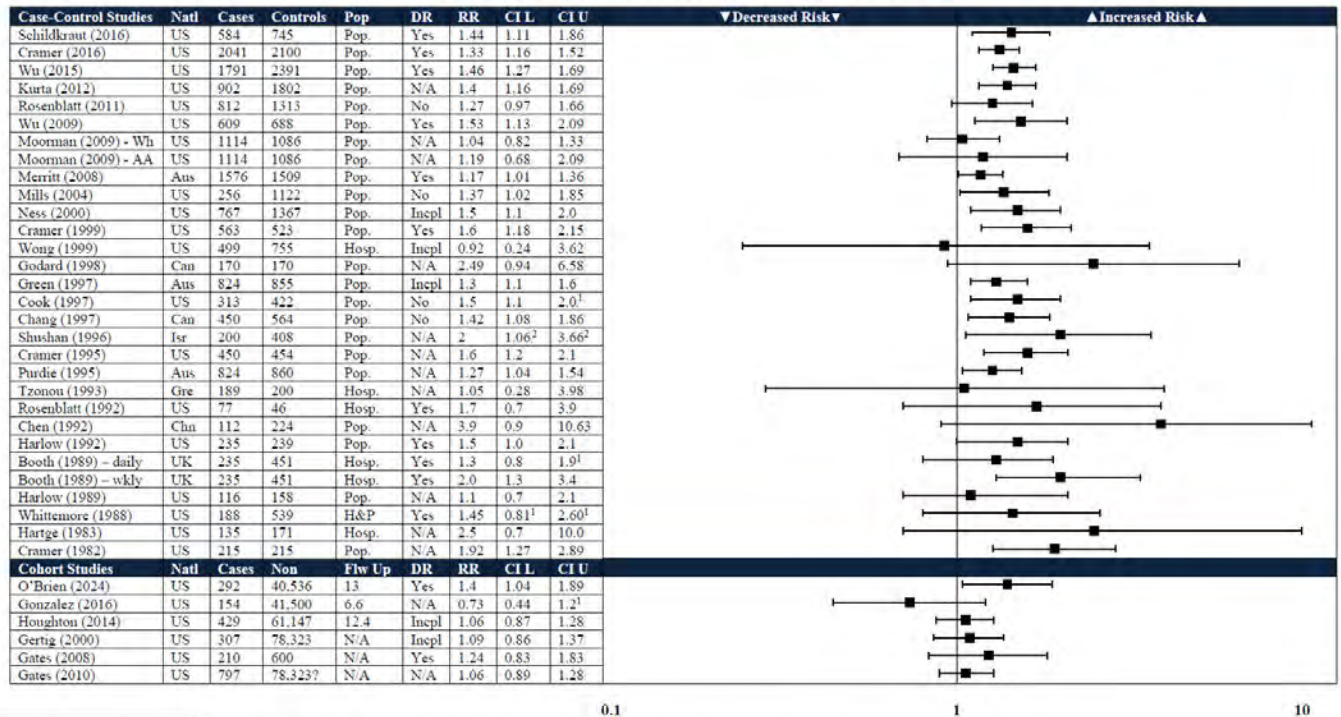
A cohort study follows a group of people with defined characteristics, such as talcum powder exposure, and who are followed to determine incidence of an outcome, in this case development of ovarian cancer. Cohort studies can be retrospective or prospective. They can calculate rates of disease in exposed and unexposed individuals for multiple outcomes over time. Potential disadvantages of cohort studies include the requirement of large number of subjects for rare exposures and outcomes and long duration of follow up for certain conditions. (Song et al. 2010). These disadvantages apply to the study of talc and ovarian cancer. Narod estimated that, for a cohort study to be properly powered to accurately predict the risk associated with talc use and ovarian cancer, as many as 200,000 women may be necessary. (Narod 2016).

A meta-analysis combines the results from previous studies to derive conclusions from a larger set of data. Outcomes from a meta-analysis may include a more precise estimate of the effect of treatment or exposure (talcum powder) than any individual study contributing to the pooled analysis. (Haidich (2010)). A meta-analysis weights the strengths of the studies before combining the data, unlike a pooled study. A meta-analysis can be especially useful to review a complex, sometimes conflicting body of literature.

A randomized control trial, in which participants are divided by chance into separate groups to compare different interventions, is considered the gold standard in some research situations. However, it would be unethical and impractical to conduct a prospective randomized control clinical trial to compare the outcomes of women who did and did not use genital talcum powder because of its known carcinogenic potential.

For this project, I reviewed all epidemiological studies related to talcum powder and ovarian cancer, but concentrated on the cohort studies, the meta-analyses, and more recent high-quality case-control studies. I critically analyzed factors such as study design, journal quality, number of subjects, length of follow-up, and potential biases. The following forest plots, prepared at the direction of Anne McTiernan, MD, PhD, are helpful presentations of relevant data from epidemiological studies.

Figure 2: Case-Control and Cohort Studies

<sup>1</sup> Corrected data-point from study text (report figure: Cook 1997 CI Upper 2.3; Gonzalez CI Upper 1.21; Booth 1989 CI Upper 1.0; Whittemore CI p=0.06).<sup>2</sup> Corrected data-point from defense expert report(s) (report figure: p=0.04).

## Case-Control Studies

There are numerous case-control studies. Overall, the case-control studies are consistent showing a 30-50% increase in risk of ovarian cancer with talcum powder use. I found the most recent ones to be the most useful, based on their size and quality of design. Several are summarized below: A study by Wu published in 2015, evaluated 1701 women with EOC in California. The conclusion of this study found that talc significantly increased the risk of ovarian cancer – 40% in whites, 20% in Hispanics, and 56% (not statistically significant) in African Americans. The number of African Americans with ovarian cancer was only 128 and may account for the non-significant increase. (Wu et al. 2015).

Cramer published a recent case-control study of nearly 4,000 women in Massachusetts and New Hampshire with ovarian cancer and found that genital use of talcum powder, either alone or in combination with body use, was associated with a statistically significant elevated epithelial ovarian cancer risk (OR 1.33). Risk increased with frequency and duration of use. Talcum powder use increased risk for serous and endometrioid tumors with the dose response most apparent for invasive serous cancer. (Cramer et al. 2016).

A multi-center study sponsored by National Cancer Institute of epithelial ovarian cancer in African-American women, a group with a high prevalence of talcum powder use, determined that regular genital powder use was associated with an increased risk of epithelial ovarian cancer (OR 1.44). A dose-response relationship was found for duration of use and number of lifetime applications ( $P < 0.05$ ). Additionally, talcum powder use was common (62.8% of cases and 52.9% of controls). (Schildkraut et al. 2016).

### **Cohort Studies**

The Nurses' Health Study (NHS I) is a prospective study of 121,700 nurses who were aged 30-55 years at enrollment in 1976 and followed through 1996 at the time of the publication. In the NHS, talcum powder use was ascertained once in 1982, the same year as the first case-control study showing an association of talc use with ovarian cancer. (Cramer et al. 1982). The follow up period for this study was 12.9 years. The study concluded there was no overall association with talc "ever use" and epithelial ovarian cancer. However, there was a statistically significant increased risk of invasive serous ovarian cancer (40%) that was higher with more frequent talcum powder use. The short period of follow up may not account for all ovarian cancer cases due to latency considerations between talcum powder usage and the development of ovarian cancer. (Gertig et al. 2000). A second report of the Nurses' Health Study (NHS II) in 2010 did not find a statistically significant increased risk with talcum powder usage, either epithelial cancer as a whole or serous subtype. (Gates et al. 2010).

The Women's Health Initiative (WHI) enrolled 93,676 women from 1993-1998. Women were eligible if they were aged 50 to 79 (mean 63.3 years) at enrollment and postmenopausal. Mean follow-up was 12.2 years. Use of powder on the genitals was associated with 12% increased risk of ovarian cancer, though this was not statistically significant. Limitations of this study include lack of information regarding oophorectomy and recall bias regarding history of talc "ever use". Additionally, the short follow-up may not account for all cases of ovarian cancer. Information regarding the frequency or duration of powder usage was not obtained. (Houghton et al. 2014).

The Sister Study (2003-2009) followed 50,884 women in the US and Puerto Rico who had a sister diagnosed with breast cancer. At enrollment, participants were asked about douching and talcum powder use in the previous twelve months. During follow-up (median 6.6 years) 154 women reported a diagnosis of ovarian cancer but only seventeen of those reported talc use. The authors determined that there was little association between baseline talcum powder use and subsequent ovarian cancer. Douching at baseline, more common in talc users, was associated with increased risk. All ovarian cancers were grouped together. Limitations of this original study include: 1) talc use was only obtained at baseline and was uncommon (analysis was based on only 17 cases), 2) no histologic information was obtained, so it is impossible to analyze relationship to serous subtype, 3) no risk elevation has ever been reported with dusting of diaphragm, cervical cap, or sanitary napkins, and 4) the short follow-up fails to account for the latency period. (Gonzalez et al. 2016).

All of the original cohort studies are limited by lack of power, failure to make the appropriate queries, selection bias, and short follow-up.

Fortunately, the Sister Study has been updated with more detailed information about the use of douche and genital talc, which was obtained in the fourth follow-up questionnaire (2017-2019). (O'Brien, et al. J Clin Oncol 00:1-15 (2024)). The authors used models that adjusted for exposure misclassification, and genital talc use was positively associated with ovarian cancer (HR range, 1.17-3.34). In women who were frequent users, the hazard ratio was 1.81 (1.29 to 2.53), and in women who were long-term genital talc users, the hazard ratio was 2.01 (1.39 to 2.91). Genital use of talcum powder by women during their 20s and 30s found the greatest increased risk. This study considered recall bias and found an increased risk of ovarian cancer both with and without correction for it.

This study was accompanied by an editorial by Harris et al. (2024), also in the Journal of Clinical Oncology, with a takeaway stating, “Given that genital powder use and douching are modifiable exposures potentially associated with a highly fatal disease, these data suggest that people at risk for ovarian cancer, particularly those in their 20s and 30s, should be made aware of the potential risks.” The editorial additionally states that “Primary care providers and gynecologists should consider addressing routine genital powder use and douching with their patients in a manner that addresses potential risks....”

The same day this paper was published, the American Society of Clinical Oncology in *ASCO Perspective* addressed this study, stating, “‘This study underscores the potential risks associated with intimate care products, particularly genital talc. The evidence adds to a growing body of literature that suggests such products could contribute to an increased risk of ovarian cancer, especially among frequent users and those using these products in their 20s and 30s,’ said ASCO Expert Fumiko Chino, MD, Radiation Oncologist at Memorial Sloan Kettering Cancer. ‘Despite challenges in assessing exposure history and biases inherent in retrospective data, our findings are robust, showing a consistent association between genital talc use and ovarian cancer,’ said lead study author Katie M. O’Brien, Ph.D., researcher at the Epidemiology Branch of the National Institute of Environmental Health Sciences. ‘This study leverages detailed lifetime exposure histories, and the unique design of the Sister Study, to provide more reliable evidence that supports a potential association between long-term and frequent genital talc use and ovarian cancer.’”

### Meta-Analyses and Pooled Studies (All Ovarian)

Meta-Analyses	Studies	Cases	DR	RR	CIL	CI U	▼ Decreased Risk ▼	▲ Increased Risk ▲
Woolen (2022)	11	6542	Yes	1.47	1.31	1.65		
Taher (2018)	27	17,149	Yes	1.28	1.2	1.37		
Penninkilampi (2018)	27	14,311	Yes	1.31	1.24	1.39		
Berge (2018)	27	N/A <sup>1</sup>	Yes	1.22	1.13	1.3		
Langseth (2008)	20	N/A <sup>1</sup>	N/A	1.35	1.26	1.46		
Huncharek (2003)	16	5260	No <sup>2</sup>	1.33	1.16	1.45		
Cramer (1999)	14	3834	N/A	1.4	1.2	1.5		
Gross (1995)	10 <sup>3</sup>	1509	N/A	1.29	1.02	1.63		
Harlow (1992)	6	1106	N/A	1.3	1.1	1.6		
Pooled Meta-Analyses	Studies	Cases	DR	RR	CIL	CI U		
Terry (2013)	8	8,525	Yes	1.24	1.15	1.33		
O'Brien (2020)	4	2168	No	1.08	0.99	1.17		
↳ Patent Reproductive Tract	4	1384	Yes	1.13	1.01	1.26		
Davis (2021)	5	AA:620	No	1.22	0.97	1.53		
		Wh:2800		1.36	1.19	1.57		

0.5

1

2

### Meta-Analyses and Pooled Studies

Five meta-analyses addressed the relationship between genital talcum powder use and ovarian cancer and each of these found a statistically significant relationship. (Berge, 2018, Penninkilampi 2018, Taher 2019, Davis 2021, Woolen 2022). The comprehensive meta-analysis by Penninkilampi and Eslick, published in 2018, included 24 case-control (13,421 cases) and three cohort studies (890 cases). The authors found that “any” perineal talc use was associated with an increased risk of ovarian cancer (OR = 1.31; 95% CI = 1.24, 1.39). More than 3600 lifetime applications (OR = 1.42; 95% CI 1.25, 1.39) were slightly more associated with ovarian cancer than <3600 (OR = 1.32; 95% CI = 1.15, 1.50). An association with “ever use” of talc was found in case-control studies (OR = 1.35; 95% CI = 1.27, 1.42), but not cohort studies (OR 1.06; 95% CI = 0.90, 1.25). However, cohort studies did find an association between talc use and invasive serous ovarian cancer (OR = 1.25; 95% CI = 1.01, 1.55). The authors stated that case-control studies are preferred in this situation because statistical power is easier to obtain with the larger number of ovarian cancer cases and controls and the lengthy follow-up necessary for a prospective study is not required. I agree. The authors determined that perineal talc use is associated with a 24%–39% increased risk of ovarian cancer that is suggestive of a causal association. (Penninkilampi and Eslick 2018).

Of note, the Penninkilampi meta-analysis was identified as one of the “best articles” of 2018 on ovarian cancer in *Obstetrics and Gynecology*, the journal published by the American College of Obstetricians and Gynecologists. (Wright 2018).

In addition to Penninkilampi, the four other recent meta-analyses described similar findings. Berge determined that the summary relative risk (RR) for ever use of genital talc and ovarian cancer was 1.22 [95% confidence interval (CI): 1.13–1.30]. (Berge 2018). Taher, a meta-analysis commissioned by Health Canada, also found a statistically significant positive association between perineal use of talc powder and ovarian cancer [OR: 1.28 (95% confidence interval (CI): 1.20 - 1.37)]. (Taher 2019).

Davis (2021) focused on African American women as genital talcum powder use is more common in this group. Using data from five studies conducted by the Ovarian Cancer in Women of African Ancestry Consortium, the investigators found among African American women an increased risk with genital talcum powder use and ovarian cancer (OR = 1.22; 95% CI: 0.97-1.53) and for high grade serous (OR = 1.31; 95% CI: 1.01-1.71). For white women, the odds ratio for ever use of talcum powder and ovarian cancer was 1.36 (95% CI: 1.19-1.57) and for high grade serous 1.33 (95% CI: 1.1-1.56). For all women, the results were an increased risk of 32% both for all ovarian cancer and high grade serous, (OR = 1.32; 95% CI: 1.17-1.48) and (OR = 1.32; 95% CI: 1.15-1.51) respectively.

Woolen (2022), a systematic review and meta-analysis, found a statistically significant increased risk of ovarian cancer with frequent use of perineal talcum powder (defined as  $\geq 2$  times per week (OR = 1.47; 95%, CI 1.31-1.65). Woolen reported data regarding daily use from the Nurse's Health Study (NHS) which found a statistically significant increased risk in all women (1.27, 95%, CI 1.09-1.49) and in women with patent fallopian tubes (1.40, 95%, CI 1.17-1.68).

In addition to these meta-analyses, O'Brien published a pooled study in 2020. This study pooled data from cohort studies: Nurse's Health Study I and II (NHS), Women's Health Initiative (WHI), and the Sisters Study. (O'Brien 2020, O'Brien Supp. E-Tables 2020, Gossett 2020). This study included 252,745 subjects; 1884 developed confirmed ovarian cancer. The information obtained in these studies on talcum powder usage patterns was different in each of these cohorts. However, the authors attempted to standardize these discrepancies by combining groups across the studies. The authors acknowledged the direct physical pathway between exposure of talcum powder on the perineum and the fallopian tubes and ovaries.

The overall relative risk for "ever use" versus "never use" of genital talcum powder was 1.08 (CI 0.99-1.17). However, significantly elevated risk was found in women with patent reproductive tracts (RR 1.13; CI 1.01-1.26). In addition, a statistically significant increased risk was noted in frequent users (at least weekly) and women who had previously used hormone therapy. There were limitations and deficiencies in this study that are discussed in Letters to the Editor. (Cramer & Harlow, Letters to the Editor with Reply, 2020).

### **Summary of Epidemiological Evidence**

When looking at epidemiological studies in their totality, the data demonstrates a consistent, replicated, and statistically significant increased risk of developing epithelial ovarian cancer with perineal talcum powder use. Invasive serous carcinoma is the most commonly associated histologic subtype. The risk elevation is 20-60%. This risk is stable among case-control studies, one cohort study, and all meta-analyses/pooled analyses over several decades. Recall and confounding bias in case-control studies appear to have minimal impact. (Penninkilampi and Eslick 2018; Langseth et al. 2008). There appears to be no significant publication bias. (Berge et

al. 2017; Penninkilampi and Eslick 2018). Meta-analysis is the most reliable and scientifically valid epidemiological methodology to evaluate the association of talcum powder usage with ovarian cancer risk.

## **VI. ASBESTOS, FIBROUS TALC, AND OTHER CONSTITUENTS OF TALCUM POWDER**

Asbestos is one of the most potent carcinogens known. All forms of asbestos (chrysotile, crocidolite, amosite, tremolite, actinolite, and anthophyllite) are carcinogenic to humans. (IARC 2012) The conclusions reached by International Agency for Research on Cancer (IARC) about asbestos and its carcinogenic risks apply to these six types of asbestos wherever they are found and includes talc containing asbestiform fibres (fibrous talc or talc fibers). (IARC 2012) Asbestos was first linked to pulmonary mesothelioma in 1935 (Gloyne 1935) and has been known to be an etiologic factor for ovarian cancer since 1965. (Graham and Graham 1967).

According to IARC, asbestos causes mesothelioma of the lung, larynx, and ovary. Based on multiple positive cohort mortality studies of women with heavy occupational exposure to asbestos, IARC's Working Group determined there is a causal association between asbestos exposure and ovarian cancer. The IARC 2012 Monograph on asbestos and fibrous talc states, "consumer products (e.g., cosmetics, pharmaceuticals) are the primary source of exposure to talc for the general population. Inhalation and dermal contact (i.e., through perineal application of talcum powders) are the primary routes of exposure." (IARC 2012).

A recent meta-analysis by Nowak (2021) found that there was a significant increased risk in ovarian cancer following occupational asbestos exposure (OR=1.88 (1.47, 2.39) and concluded that asbestos exposure is a cause of ovarian cancer. The EPA has also concluded that ovarian cancer is a health effect caused by exposure to asbestos. (EPA, Fed. Reg., Vol. 88, No. 141 (2023).

The scientific literature demonstrates that talc can contain asbestos and fibrous talc. (Cralley et al. 1968; Rohl et al. 1976; Lockey 1981; Paoletti et al. 1984; Blount 1991; Werner 1982). Blount (1991), Johnson & Johnson internal testing results and documents, and testing results of Dr. William Longo and Dr. Mark A. Rigler have demonstrated that talcum powder products, including Johnson's Baby Powder and Shower to Shower, may contain asbestos. (Blount 1991; "Deposition of Alice M. Blount, Ph.D., Circuit Court of the City of St. Louis State of Missouri, Case No.: 1522-CC10417-01" 2018; "Exhibit 28, Deposition of John Hopkins, Ph.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2378" 2018; "Exhibit 47, Deposition of Julie Pier, In Re: Talcum Powder Prod. Liab. Litig., MDL 2738" 2018; Longo & Rigler Expert Report (Feb. 2, 2019). Drs. Longo and Rigler found that 44 of 65 (68%) historical samples of Johnson's Baby Powder and Shower to Shower were positive for amphibole asbestos. These historical samples originated in the 1960s through the early 2000s. They found that 55 of 56 of these (98%) historical samples contained fibrous talc.

In October 2019, the FDA reported the results of testing conducted by AMA Analytical Services, Inc. on a bottle of Johnson's Baby Powder purchased in 2018. AMA identified chrysotile asbestos and talc fibers. These findings provide further data demonstrating the presence of asbestos and talc fibers in talcum powder products. (AMA Certificate of Analysis, October 11, 2019, Owen 2019).

Asbestos fibers and talc fibers exposure are known to cause ovarian cancer; their presence in Johnson & Johnson talcum powder products contributes to the carcinogenicity of the products through an established mechanism of inflammation, DNA damage, and genetic alterations. Asbestos and talc fibers may directly induce DNA damage mediated by reactive oxygen species. Fibers have also been shown to physically interfere with the mitotic apparatus, which may result in aneuploidy or polyploidy, and specific chromosomal alterations characteristic of asbestos-related cancer. In addition, persistent inflammation and macrophage activation can secondarily generate additional reactive oxygen species and reactive nitrogen species that can indirectly induce genotoxicity in addition to activation of intracellular signaling pathways, resistance to apoptosis, stimulation of cell proliferation, induction of epigenetic alterations, and activation of oncogenes/inactivation of tumor suppressor genes. (IARC 2012; Kane et al. 1996; Mossman 2018; Shukla et al. 2009; M. C. Jaurand 1997, 1989; M. Jaurand 1991).

In addition to asbestos and fibrous talc, talcum powder products have been shown to contain nickel, chromium, and cobalt. (“Exhibit 47, Deposition of Julie Pier, In Re: Talcum Powder Prod. Liab. Litig., MDL 2738” 2018). Nickel and chromium are Group 1 carcinogens according to IARC. Cobalt is a Group 2b (or possible carcinogen) according to IARC. The inflammatory mechanism for carcinogenesis for these metals is similar to that described for asbestos, fibrous talc, and platy talc.

I have also seen the list of “fragrance chemicals” added to Johnson’s Baby Powder and Shower to Shower products, as well as the expert report of Dr. Michael Crowley. Many of these chemicals are known to be irritants, toxins, and carcinogens. Some have been shown to be harmful to the reproductive organs and function. These chemicals would be expected to accompany the talcum powder as it migrates or is transported through the genital tract to the fallopian tubes and ovaries. At least some of these chemicals would also be expected to be absorbed through the vaginal mucosa. These chemicals likely contribute to the inflammatory properties, toxicity, and carcinogenicity of these talcum powder products.

The presence of these constituents provides additional support for the mechanism by which Johnson’s Baby Powder and Shower to Shower cause ovarian cancer, as demonstrated in the epidemiological literature.

## **VII. MIGRATION AND TRANSPORT OF TALC THROUGH THE GENITAL TRACT**

In the adult female, the peritoneal cavity communicates with the outside via the fallopian tubes, uterus, and vagina. It is an open system (Netter, Crum, Blaustein). This is apparent in literature describing normal female external genitalia. (Lloyd 2005). MRI evidence also demonstrates an open vagina even in its nondistended state. (Barnhart 2006). As such it is universally accepted in the gynecologic community that substances migrate and/or be transported in both directions.

Evidence to support the migration/transport of talc particles and fibers includes, but is not limited to:

1. Sperm: Sperm move more quickly through the genital tract than would be predicted from innate motility, indicating a transport mechanism. In addition, dead sperm and inanimate sperm particles (lacking flagella) are efficiently transported upwards through the uterus

- and tubes. (Jones and Lopez 2006). This process involves directed uterine contractility that has been confirmed through research of intrauterine pressure measurements. (Kissler et al. 2004).
2. Carbon particles: Inert carbon particles were placed in the posterior vaginal fornix and observed in the fallopian tubes 28 and 34 minutes later (2 out of 3 patients tested). This research confirmed that sperm motility is not the chief factor in transport and that contractions of the uterus are likely involved in process of migration/transport of particles through the genital tract. (Egli and Newton 1961).
  3. Retrograde menstruation: The transport of menstrual flow into the peritoneal cavity was first proposed by Sampson in 1927 and is now well-established as the mechanism for endometriosis initiation. The prevalence of retrograde menstruation has been described in 90% of investigated women. (Blumenkrantz et al. 1981; Halme et al. 1984).
  4. Particulate radioactive material: Particulate radioactive material was placed in the posterior vaginal fornix. Twenty four hours later, radioactive material was present in the adnexa separate from the uterus in 2/3 of cases. The authors concluded that the transit of particles from the vagina to the peritoneal cavity and the ovaries “is probably the same for many chemical substances used for hygienic, cosmetic, or medicinal purposes, many of which may have potential carcinogenic or irritating properties . . . migration of certain chemical substances could play an important aetiological role in gynaecological diseases and especially in carcinoma of the ovary.” (Venter and Iturralde 1979).
  5. Bathwater: Psooy in 2010 demonstrated that bathwater can become entrapped in the vagina in females with normal anatomy. (Psooy 2010).
  6. “Uterine peristaltic pump”: Rapid and sustained sperm transport from the cervix to the fallopian tube is provided by uterine peristaltic contractions that can be visualized by vaginal sonography. (Kunz 1997; Zervomanoklakis et al. 2007).
  7. Glove powder: Studies have demonstrated retrograde migration of starch after gynecological examination with powdered gloves. The authors concluded that: “Consequently, powder or any other potentially harmful substances that can migrate from the vagina should be avoided.” (Sjösten, Ellis, and Edilstam 2004).
  8. Talc: Studies have documented the presence of talc particles in the adnexa, ovaries, and peritoneum. The authors of these studies have concluded that this occurs as a result of migration of talc particles from the vagina through the cervix, uterus, and fallopian tubes. (Henderson et al. 1971, 1979; D. W. Cramer 1999; Heller et al. 1996). Talc has also been noted in pelvic lymph nodes which could also occur through migration, absorption, or inhalation with transport through the lymphatic system. (Cramer et al. 2007). A follow-up to the 2007 study regarding the presence of talc in lymph nodes and other pelvic organs controls for contamination as a potential source of the talc particles seen. (McDonald 2019 AJCP).

The migration of particles, including talc, asbestos and other constituents of talcum powder products, from the perineum to the upper genital tract (tubes and ovaries) is a key element in the mechanism by which talcum powder products cause ovarian cancer. The evidence supporting this process is robust and universally accepted by the medical community.<sup>3</sup> (FDA Citizens Petition response 2014). I have considered the limited evidence to the contrary and find it non-persuasive.

In addition to perineal application resulting in migration and transport of particles through the genital tract, inhalation of these particles is another recognized route of exposure. (IARC 2012; W. E. Longo, Rigler, and Egeland 2017; Steiling et al. 2018; Cramer et al. 2007). With either of these routes, talcum powder components can also be directly absorbed into the lymphatic system and bloodstream.

## **VIII. INFLAMMATION AND MOLECULAR BASIS FOR CARCINOGENESIS OF TALCUM POWDER PRODUCTS**

The link between inflammation and cancer has been recognized since the 1800s. Inflammation and oxidative stress increase the risk of cancer, including ovarian cancer. It has been known since the 1940's that talc causes inflammation. (Eberl and George 1948).

There is an increased risk of malignancy with many inflammatory processes, including infection, autoimmune diseases, hypoxia, and chemical and physical agents (including talc and asbestos).

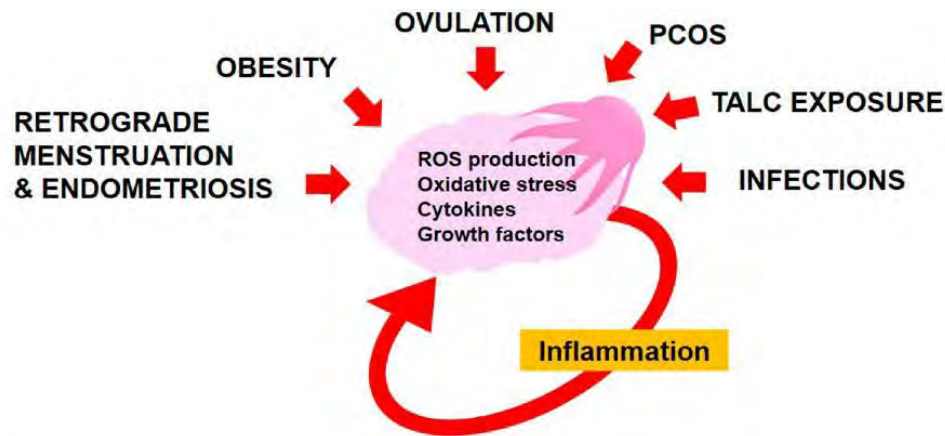
1. Virchow noted inflammatory cells (leukocytes) in neoplastic tissue as early as 1863.
2. Inflammation resulting from talcum powder use has been proposed as a potential mechanism for the association with EOC. (Ness 1999; Balkwill & Mantovani 2001; Phung et al. 2022).<sup>4</sup>
3. Both tumor cells and inflammatory cells produce cytokines and chemokines which can contribute to cancer growth and spread.
4. Cytokines from inflammation/oxidative stress can influence multiple steps of the neoplastic process: survival, growth, mutation, proliferation, differentiation, and movement of cells. (Balkwill and Mantovani 2001; Reuter et al. 2010; Crusz and Balkwill 2015; Kiraly et al. 2015; Fletcher et al. 2019). Below are examples of inflammatory cytokines and their influence on cancer:
  - a. Tumor necrosing factor (TNF) can induce reactive oxygen (nitric oxygen (NO)) which can cause DNA damage. DNA damage can also occur by inhibiting cytochrome p450.

---

<sup>3</sup> FDA states that the “potential for particulates to migrate from the perineum and vagina to the peritoneal cavity is indisputable.

<sup>4</sup> Richard Zazenski, Director Product Safety for Luzenac, states in an email to Bill Ashton, on September 30, 2004: “I came across this paper this morning published in the April 2004 journal “Human Reproduction”, an official journal of the European Society for Human Reproduction and Embryology. It offers some compelling evidence **in support of the ‘migration’ hypothesis**. Combine this ‘evidence’ with the theory that talc deposition on the ovarian epithelium initiates epithelium inflammation – which leads to epithelium carcinogenesis – and you have a potential formula for NTP classifying talc as a causative agent in ovarian cancer.” (“IMERYS137677-IMERYS137690” 2004).

- b. Migration inhibitory factor (MIF) can inhibit the activity of p53 which is a tumor suppressor.
  - c. IL-6, IL-1, IL-8 are all known to stimulate tumor cell proliferation and survival.
  - d. Multiple inflammatory cytokines (TNF, IL-1, IL-6, TGF beta 1) can stimulate angiogenesis.
  - e. TNF and IL-1 stimulate adhesion to promote invasion and metastasis of cancer cells.
5. Inflammation/oxidative stress affects all phases of cancer development and growth and is implicated in pathogenesis of ovarian cancer. This leads to decreased apoptosis and increased anaerobic metabolism. Anaerobic metabolism leads to an acidic state which facilitates cancer growth. (G. Saed 2017; G. M. Saed et al. 2010; Jiang et al. 2011; Shan and Liu 2009; Freedman et al. 2004).
6. Talcum powder causes inflammation/oxidative stress both *in vitro* and *in vivo* (in both animal and human tissues). (Eberl and George 1948; Graham and Jenkins 1952; Hamilton et al. 1984; Buz'Zard and Lau 2007; Shukla et al. 2009; Fletcher et al. 2019; Akhtar 2010, 2012; Mandarino et al. 2020; Emi et al. (2021); "NTP Toxicology and Carcinogenesis Studies of Talc (CAS No. 14807-96- 6) (NonAsbestiform) in F344/N.Rats and B6C3F1 Mice (Inhalation Studies)" 1993; Keskin et al. 2009).
7. Although the literature is still somewhat contradictory, aspirin and other non-steroidal anti-inflammatory drugs have been shown to prevent and treat certain types of cancer, particularly colorectal. (Trabert et al. 2019; Rayburn, Ezell, and Zhang 2009; Chan et al. 2005).
8. Fletcher et al. describes induction of gene point mutations after Johnson's Baby Powder exposure, corresponding to known single nucleotide polymorphisms (SNPs) in normal and ovarian cancer cells *in vitro*. These SNPs alter the activities of key oxidant enzymes and enhance the pro-oxidant state. This process of gene mutation is part of the carcinogenic cascade initiated by inflammation and oxidative stress. These results are consistent with other *in vitro* studies. (Shukla et al. 2009, Buz'Zard and Lau 2007, Akhtar et al. 2010, 2012; Mandarino et al. 2020; Emi et al. (2021). Harper 2023 reported cell proliferation, neoplastic transformation and p53 mutations when cells in culture were exposed to Johnson's Baby Powder.
9. In summary, inflammation/oxidative stress has been well established as a significant factor in the development of cancer, including epithelial ovarian cancer. Inflammation/oxidative stress facilitates cancer growth at multiple steps. A recent review article provides a comprehensive discussion of the role of inflammation in the initiation, development, progression, metastasis, and chemoresistance of EOC. This paper identifies talc exposure as one source of inflammation in the ovary and fimbria. (Savant 2018).



**Figure 1.** Sources of inflammation in the ovary and fimbriae. Ovulation, retrograde menstruation, endometriosis, infections, exposure to talc, Polycystic Ovarian Syndrome (PCOS), and obesity result in exposure of the ovary and fimbriae to reactive oxygen species (ROS), oxidative stress, cytokines, and growth factors, generating an inflammatory response that leads to additional production of ROS and cytokines in the ovary. Unresolved, chronic inflammation is a critical risk factor for tumor initiation.

(Savant 2018).

## IX. CORNSTARCH

Since 1948 with a publication from Johnson & Johnson's own laboratory, it has been clear that starch is a safer alternative to talc for use on surgical gloves. Starch, unlike talc, is not an irritant and can be absorbed readily. (Eberl and George 1948).

A review paper by Whysner and Mohan in 2000 evaluated the available literature regarding the effects of cornstarch in the peritoneal cavity, comparing the potential risk of ovarian cancer with cornstarch versus talc. Unlike talc, the authors noted that 1) cornstarch is capable of being removed by physiologic processes from the peritoneal cavity, 2) cornstarch contains no asbestos, and 3) epidemiologic studies reviewed found no relationship between cornstarch powder use and ovarian cancer. The authors concluded that any increased risk for ovarian cancer as a result of perineal exposure to cornstarch was biologically implausible. (Whysner and Mohan 2000).

## X. DETERMINING WHETHER A RISK FACTOR IS CAUSATIVE

Although Bradford Hill factors are primarily an epidemiologic tool, the general principles provide a framework for clinical doctors to assess whether diseases like cancer can be caused by a particular agent, condition, or practice. The Bradford Hill factors are not a formal checklist. These considerations are the same as those that I apply regularly, both in my clinical practice and research, and are similar to the principles of evidence-based medicine. (Brewster 2017 in DiSaia and Creasman, Fedak 2015).

The factors as described by Bradford Hill are:

1. Strength (effect size): A small association does not mean that there is not a causal effect, though the larger the association, the more likely that it is causal.
2. Consistency (reproducibility): Consistent findings observed by different persons in different places with different samples strengthens the likelihood of an effect.
3. Specificity: Causation is more likely if there is a specific disease with no other likely explanation. Most frequently used example is a specific bacterium causing a particular disease (e.g., *M. tuberculosis* causes TB and *T. pallidum* causes syphilis). The more specific an association between a factor and an effect is, the bigger the probability of a causal relationship, but this is not necessarily required.
4. Temporality (and Latency): The effect must occur after the cause (and if there is an expectant delay between the cause and expected effect, then the effect must occur after that delay).
5. Biological gradient (Dose-response): Greater exposure should generally lead to greater incidence of the effect. There may also be a minimum level of exposure necessary (threshold). As a general principle of pharmacology and toxicology, the likelihood of a response increases with longer and more frequent exposure to an agent (dosage). (Klaassen and Doull 2013).
6. Plausibility: A plausible mechanism between cause and effect is helpful (but Hill noted that knowledge of the mechanism can be limited by current knowledge). Knowledge and understanding of the biological mechanisms changes over time.
7. Coherence: Coherence between epidemiological and other research data/findings increases the likelihood of an effect. Coherence is the idea that an alleged association should not conflict with substantive knowledge that exists regarding the disease at issue.
8. Experiment: "Occasionally it is possible to appeal to experimental evidence". This factor often refers to support from animal and clinical research with sound methodology. Has there been an attempt to collect data to analyze a cause and effect relationship? Do studies use controls when feasible? Are experiments reproducible? Are there ethical limitations?
9. Analogy: The effect of similar factors may be considered. All the rules relating to scientific methodology must be employed at each stage of the analogy. (Fedak et al. 2015).

I considered these aspects of a causal relationship in determining whether talcum powder products cause ovarian cancer.

### **Strength**

Overall, the studies show a 1.3-1.4 odds ratio of increased risk of ovarian cancer among perineal talc users. A recent and most complete meta-analysis determined an odds ratio of 1.31 with any perineal talc use and the development of ovarian cancer. An association with ever use of talc was found in case-control studies (OR = 1.35) and in the newest cohort study publication (HR range = 1.17-3.34) when adjusted for exposure misclassification. Cohort studies also found an association between talc use and invasive serous type ovarian cancer. (Penninkilampi and Eslick 2018). If invasive serous ovarian cancer or frequent use is considered, the association is even stronger.

Strength is also supported when there are numerous studies with consistent findings as in the case of talcum powder and the association with ovarian cancer. In general, many of the studies are well conducted, numerous and consistent, making the strength of the association valid. When looking at causation of a relatively rare disease like ovarian cancer, this magnitude of risk is statistically and clinically significant and not unusual. With ovarian cancer, a disease which is difficult to diagnose and deadly, any preventable risk factor (talcum powder) should be deemed critically important and avoided.

### **Consistency**

The magnitude of risk has been consistent over four decades, across various geographic populations and throughout the United States, Canada, and Australia. Results are generally consistent across case-control, meta-analysis, and pooled analysis studies. I deemed the consistency and replication of the studies to be important in my causation analysis.

### **Specificity**

The most compelling disease associated with talcum powder use is epithelial ovarian cancer, therefore specificity for a disease is demonstrated. The most recent cohort publication also addressed specificity as there was no association between genital talc use and increased risk of uterine or breast cancer.

### **Temporality**

Exposure to talcum powder and the resultant development of ovarian cancer meets the temporality consideration that the outcome follows the event. The average latency period between exposure to talc and diagnosis of ovarian cancer is at least twenty years. This is consistent with other cancers known to be caused by chemicals and/or toxins. (Purdie et al. 2003; Okada 2007).

### **Biologic Gradient (Dose-response)**

Exposure is difficult to quantify with talcum powder applications with regard to how much is used, where it is concentrated, and how much actually reaches the tubes and ovaries; Many of the studies did not obtain the necessary information to evaluate dose response and lacked adequate power to assess dose-response accurately. Despite the lack of sufficient information in many studies, recent meta-analyses/pooled study and a case-control studies do show a dose response, using frequency and duration of use as parameters. (Penninkilampi and Eslick 2018; Cramer et al. 2016; Schildkraut et al. 2016; Terry et al. 2013; Wu et al. 2015). Data from the Nurse's Health Study demonstrated a dose response between non-users, less frequent users, and daily users. (Woolen 2022, Supp. Table 1). Similarly, the O'Brien (2024) publication looking at the Sister Study cohort found an even higher increased risk with frequent use and long duration of use. Modern medicine also recognizes that a monotonic dose-response curve is often overly simplistic (e.g., asbestos demonstrates a threshold rather a linear dose-response). Response can vary based on unique characteristics of the given population, exposure routes, molecular endpoints, individual susceptibility and synergistic or antagonistic effects of cumulative exposures. (Fedak et al. 2015). Given the limitations of the data, I consider this a less important factor when compared to the strength of the association, consistency, and the biological mechanism.

### **Plausibility**

The general mechanism by which talcum powder products cause ovarian cancer is established as

an inflammation-induced process. It is well-accepted that particles reach the fallopian tubes and ovaries through migration/transport through the genital tract. These particles can also reach the pelvic organs through inhalation. The particles elicit an inflammatory tissue response and initiate a cascade of events and pathways at the cellular level that result in cancer formation. This process is well-described by the medical and scientific community. In addition, as previously discussed in this report, various components of talcum powder products, including asbestos and fibrous talc, are known carcinogens and known to cause cancer by similar mechanisms.

### **Coherence**

The findings and conclusions from epidemiological, animal, and *in vitro* studies are coherent with what is known about ovarian cancer. There is also consistency with what is known about other gynecological malignancies and other cancers induced by environmental and occupational exposures.

### **Experiment**

Causation of ovarian cancer by talcum powder is supported by laboratory (*in vitro* and *in vivo*) experiments. Research is ongoing which will further elucidate specific processes.

Prospective randomized controlled clinical trials to evaluate talcum powder products and their relationship to ovarian cancer are not feasible for a variety of ethical and methodological reasons. These include the recognized toxicity of talc, asbestos, and other constituents of talcum powder, the absence of therapeutic benefit, the long latency period, and the seriousness of ovarian cancer.

### **Analogy**

As with consistency, plausibility, and coherence, the association between talcum powder and ovarian cancer is analogous to other diseases caused by various and specific carcinogens. For example, smoking causes lung cancer, asbestos causes mesothelioma and ovarian cancer, sun exposure causes skin cancer, and HPV causes cervical cancer. All of these cancers are the result of an inflammatory process initiated by a foreign agent.

Applying these Bradford-Hill guidelines and the principles of evidence-based medicine, it is my opinion that the genital use of talcum powder can cause ovarian cancer. In recent years, other scientists, physicians, and organizations have reached this same conclusion. (Health Canada 2021; IARC 2012; Penninkilampi and Eslick 2018; Schildkraut et al. 2016; Cramer et al. 2016).

Health Canada published its comprehensive final assessment on the health risks associated with talcum powder usage in the genital area, reaching similar conclusions described in my analysis. (Health Canada Assessment 2021). The human health portion of Health Canada's assessment underwent external peer review. These conclusions include:

1. "With regards to perineal exposure, analyses of the available human studies in the peer-reviewed literature indicate a consistent and statistically significant positive association between perineal exposure to talc and ovarian cancer." (iii)
2. "The available data are indicative of a causal effect." (iii)
3. "Although there are uncertainties related to bias [in the epidemiological studies], there is confidence in the robustness of the available database for use in characterizing cancer risk

attributed to talc exposure. Furthermore, the available data are indicative of a causal relationship.” (36)

4. Referencing at least 15 documents and articles, “[p]articles of talc are able to migrate into the pelvis and ovarian tissue...” (33)
5. “[T]here is support for an association on inflammation and increased risk of ovarian cancer.” (20-21)
6. “With respect to talc and induction of tumours, local chronic irritation leading to an inflammatory response is one possible mechanism of tumour progression that is frequently cited in the literature.” (20-21)

## **XI. SUMMARY OF GENERAL OPINIONS**

The opinions in this report are provided to a reasonable degree of medical and scientific certainty. A summary of these opinions follows:

1. Based on epidemiological studies, the established biological mechanism, and evidence of the presence of asbestos, fibrous talc, and other known carcinogens, talcum powder products cause epithelial ovarian cancer in some women. The genital use of talcum powder products presents a significant risk factor for ovarian cancer for *all* women who use the products.
2. When looking at epidemiological studies in their totality, the data demonstrates a consistent, replicated, and statistically significant increased risk of developing epithelial ovarian cancer with perineal talcum powder use.
3. Asbestos and fibrous talc are known human carcinogens, including ovarian cancer (IARC 2012) and have been shown to be present in Johnson’s Baby Powder and Shower to Shower. In addition, other known constituents of talcum powder products (including nickel, chromium, and cobalt) are carcinogenic, and their presence likely contributes to the cancer-causing properties of talcum powder products.
4. The extensive number of fragrance chemicals added to the talcum powder products likely contributes to the inflammatory properties, toxicity, and carcinogenicity of these products.
5. The migration/transport of talcum powder and its constituents, to the upper genital tract (tubes and ovaries) is a key element in the mechanism by which talcum powder products cause ovarian cancer. The evidence supporting migration is robust and universally accepted by the gynecologic community. In addition to perineal application resulting in migration and transport of particles and fibers through the genital tract, inhalation of these particles is another recognized route of exposure.
6. Inflammation/oxidative stress is an early and essential step in the molecular process by which talcum powder products cause ovarian cancer.
7. Cornstarch is a safer alternative to talcum powder.
8. Talcum powder use is a preventable causative risk factor for EOC.

Based on my education, training, experience and expertise in ovarian and other gynecologic cancers, review of the totality of the evidence, analysis and weighing the data in the context of Bradford Hill and the principles of evidence-based medicine, it is my professional opinion to a reasonable degree of scientific and medical certainty that Johnson's Baby Powder and Shower to Shower products cause epithelial ovarian cancer in some women. The use of talcum powder products presents a significant risk factor for ovarian cancer in *all* women who use the products.

## I. CASE-SPECIFIC OPINIONS: MS. LINDA BONDURANT

I reviewed the available medical records for Ms. Bondurant, the Plaintiff Profile Form (PPF), and deposition testimony in considering my opinion regarding causation in this case. My opinions are based on my education, training, and experience, as well as the General Causation facts and opinions previously provided. After completing my review, it is my opinion that Ms. Bondurant's regular use of talcum powder products on her body, including her genital area, is a substantial contributing cause of her ovarian cancer.

Ms. Linda Bondurant (D.O.B. [REDACTED] 1959)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

In formulating my opinion regarding causation of Ms. Bondurant's ovarian cancer, I performed a differential diagnosis based on answers to the following questions:

1. Did the plaintiff have ovarian cancer? Yes.
2. Was the histologic subtype consistent with those associated with talcum powder products? Yes, clear cell carcinoma was confirmed by pathology and is a histologic subtype associated with genital talcum powder use in multiple studies.
3. Did the plaintiff have a history of sufficient perineal use of talcum-containing products? Yes, the plaintiff reports genital use of Johnson's Baby Powder 3 to 5 times per week from infancy until 2015 and Shower to Shower in her genital area daily from 1970 to 1980.
4. Was the timing of her diagnosis consistent with a talcum powder effect? Yes, although

Ms. Bondurant did have [REDACTED]

[REDACTED] This history is consistent with the latency period described with carcinogens causing cancer and talcum powder use causing ovarian cancer.

5. Were there talc particles present in the tissues analyzed, lending support to causation? The presence of talc particles or fibers in a pathology is not a requirement but if present, lends support for causation. I understand that the analysis of Ms. Bondurant's pathology is pending.

6. Were there protective factors present and, if so, what was their contribution to the development of ovarian cancer?

- She had [REDACTED].
- She [REDACTED].
- She [REDACTED].
- She [REDACTED].

7. Did Ms. Bondurant have other risk factors?

- Genetic risk factors – Ms. Bondurant underwent A [REDACTED]  
[REDACTED]
- Increasing age – Ms. Bondurant was 58 at the time of diagnosis, which is below the average age of 62.
- Nulliparity and infertility – Ms. Bondurant [REDACTED]  
[REDACTED].
- Endometriosis, polycystic ovarian syndrome – She [REDACTED]  
[REDACTED]
- Obesity – [REDACTED].
- Use of an intrauterine device – [REDACTED].
- History of pelvic inflammatory disease – [REDACTED].
- Cigarette smoking – [REDACTED]  
[REDACTED].

In summary, after reviewing the available medical records, the Plaintiff Profile Form, and deposition testimony, it is my opinion that Ms. Bondurant's use of Johnson's Baby Powder and Shower to Shower in the genital area is a contributing cause of her ovarian cancer. My opinions are made to a reasonable degree of medical and scientific certainty. I reserve the right to update this report if new information becomes available. I reserve the right to review and comment on the reports and testimony of Defendants' expert witnesses.

# Exhibit A

**CURRICULUM VITAE**

---

**Judith K Wolf, MD****PRESENT TITLE AND AFFILIATION**

Gynecologic Oncologist  
Locum Tenens  
01/2021 to present

Goshen Center for Cancer Care, Goshen, IN 4/2020- 6/2022  
Rochester General Hospital, Rochester NY 1/2021-12/2021  
Hershey Medical Cancer, Hershey PA 4/2022-7/2023  
Park Nicolett Minneapolis, MN 4/2023-10/2023

**CITIZENSHIP**

United States

**PREVIOUS WORK EXPERIENCE**

Gynecologic Oncologist  
Community Health Network  
Clearvista Parkway  
Indianapolis, IN  
06/2018 to 01/2021

Chief Medical Officer

ProvistaDx  
55 Broad St 18<sup>th</sup> Floor  
New York, NY 0004  
6/2016-6/2018

Chief Medical Officer

Vermillion, Inc  
12117 Bee Caves Rd  
Austin TX 78738  
9/2014-6/2016  
9/2014- 6/2016

Division Chief of Surgery  
Banner MD Anderson Cancer Center  
2946 E Banner Gateway Dr  
Gilbert, AZ 85235

6/2011-9/2014

Professor of Gynecologic Oncology  
The University of Texas MD Anderson Cancer Center  
1515 Holcombe Blvd  
Houston, TX 77030  
7/1995-6/2011

**EDUCATION****Degree-Granting Education**

University of Akron, Akron, OH, BS, 1982, Natural Sciences

Northeastern Ohio Universities College of Medicine, Rootstown, OH, MD, 1986, Biomedical Science

The University of Texas Health Science Center at Houston, Houston, TX, MS, 1993, Biomedical Sciences- Thesis, Characterization of two populations of the human ovarian cancer cell line, 2774, that express different levels of epidermal growth factor receptor.

**Postgraduate Training**

Residency, Obstetrics and Gynecology

U.T. Health Science Center at San Antonio, San Antonio, TX, Dr. Carl J. Pauerstein  
07/1986-06/1990

Fellowship, Gynecologic Surgery

University of Minnesota, Duluth, MN, Dr. Leo Twiggs  
07/1990-6/1991

Fellow, Gynecologic Oncology, Department of Biology The University of Texas MD Anderson Cancer Center, Houston, TX, Dr. J Taylor Wharton 07/91-06/93

Junior Faculty Associate, Gynecologic Oncology The University of Texas MD Anderson Cancer Center, Houston, TX, Dr. J. Taylor Wharton  
07/1993-06/1995

**CREDENTIALS**

Board Certification

American Board of Obstetrics and Gynecology, (Written Exam), 1990  
 American Board of Obstetrics and Gynecology: Special Qualification in Gynecologic Oncology, (Written Exam), 1996  
 American Board of Obstetrics and Gynecology, 1997  
 -Recertified 2022- 12/31/2023  
 American Board of Obstetrics and Gynecology: Special Qualification in Gynecologic Oncology, 2000  
 -Recertified 2022-12/31/2023

## **Licensures**

### **Active**

State of Arizona, AZ, 45110, 7/2011 – current  
 State of Indiana, IN 01074549B, 9/2014- current  
 State of Georgia, GA 173182 6/2014- present  
 State of Wisconsin 71734-20 9/5/2019-present  
 State of New York 307831 12/2020 to present  
 State of North Carolina 257141 2/13/2020 to present  
 State of Pennsylvania MD476656 1/31/2022 to present  
 State of Virginia 0101275018 4/27/2022 to present  
 State of Tennessee 66290 10/7/2022 to present  
 State of Minnesota 33916 1/1990-1/1993 and 4/18/23 to present

### **Inactive**

State of Kentucky- temporary license TP 106 9/6/22-4/1/2023  
 State of Texas, TX, H4856, 1988–8/2012

## **EXPERIENCE/SERVICE**

### **Academic Appointments**

Assistant Professor, Department of Gynecologic Oncology, Division of Surgery, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 1995–1999  
 Assistant Professor, Department of Gynecologic Oncology, Division of Surgery, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 1999–2002  
 Associate Professor, Department of Gynecologic Oncology, Division of Surgery, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 2002–8/2008  
 Graduate Faculty, Biomedical Sciences, Graduate School of Biomedical Sciences, The University of Texas Houston Health Science Center, Houston, TX, 2003–2011  
 Associate Professor, Department of Gynecologic Oncology, Blanton Davis Ovarian Cancer Research Program, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 2006–8/2008  
 Associate Director, Department of Gynecologic Oncology, Developmental Therapeutics, The University of Texas MD Anderson Cancer Center, Houston, TX, 2006–2011  
 Co-Division Director, Department of Gynecologic Oncology, Division of Surgery, Baylor College of Medicine, Houston, TX, 4/2006–4/2007

Professor, Department of Gynecologic Oncology, Blanton Davis Ovarian Cancer Research Program, The University of Texas MD Anderson Cancer Center, Houston, TX, 2008-2011

Associate Director, Department of Gynecologic Oncology, Developmental Therapeutics, The University of Texas MD Anderson Cancer Center, Houston, TX, 2011

Division Chief, Surgical Oncology, Banner MD Anderson Cancer Center, Gilbert, AZ 6/2011-9/2014

Vice Chair, Department of Oncology Services, Banner MD Anderson Cancer Center, Gilbert, AZ 6/2011-/9-2014

Adjunct Professor, Gynecologic Oncology, University of Texas, MD Anderson Cancer Center, Houston, Texas, 2012- 2014

Clinical Professor, Division of Clinical Education, Arizona College of Osteopathic Medicine, Midwestern University, Arizona, 2012- 2014

### **Administrative Appointments/Responsibilities**

**Assistant Program Director (Research)**, Fellowship in Gynecologic Oncology, Division of Surgery, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 1999–2004

**Medical Director**, Community Relations, Department of Gynecologic Oncology, Division of Surgery, The University of Texas MD Anderson Cancer Center, Houston, TX, 4/2008–2011

### **Other Appointments/Responsibilities**

**Member**, Felix Rutledge Society, Houston, TX, 1995-Present

President, Felix Rutledge Society, 2008-2009

**Member**, Society of Gynecologic Oncologists, Chicago, IL, 1996–Present

**Member**, Quality and Outcomes Committee, Society of Gynecologic Oncology, 2012-Present

**Member**, Breakthrough Series; Improving Care at the End of Life, Houston, TX, 1997–2011

**Founder-Chairman**, Sprint for Life 5K Fun Run, M. D. Anderson Cancer Center, Houston, TX, 1998–Present

**Chairman**, Medical and Scientific Advisory Board, National Ovarian Cancer Coalition, Dallas, TX, 2003–Present

**President**, Houston Gynecologic & Obstetrics Society, Houston, TX, 2003–2004

**Treasurer**, Houston Gynecologic & Obstetrics Society, Houston, TX, 1998–2000

**Vice President**, Houston Gynecologic & Obstetrics Society, Houston, TX, 2001–

**Member**, Gynecologic Oncology Group, Philadelphia, PA, 2001–2011

**Departmental Liaison**, M D Anderson Cancer Center Women Faculty Programs, Houston, TX, 2/2010–2011

### **Endowed Positions**

N/A

**Consultantships**

N/A

**Military or Other Governmental Service**

N/A

**Institutional Committee Activities**

Medical Records Committee, Member, 1995–2011

Clinical Research Committee, Member, 1997–2000

Women's Faculty Administrative Organization Steering Committee, Member, 1998–1999

Cancer Committee, Hermann Hospital, Member, 1998–2001

Search Committee, Anesthesia, Member, 1999–2000

Ovarian SPORE Executive Committee, Member, 1999–2011

Student and Trainee Resources-Clinical Fellow's Research Award, Faculty Reviewer, 1999

Cancer Therapeutics Discovery Program Grants, Reviewer, 2000–2004

Clinical Research Committee, Member, 2001–2004

Search Committee, Internal Medicine, Member, 2001

Uterine SPORE Executive Committee, Member, 2003–2011

Faculty Promotion and Tenure Committee, Division of Surgery, Member, 2003–2011

Gynecologic Oncology Surgical Research Program (GO-SRP) Committee, Member, 2004–2011

Fellowship Planning Committee, Member, 2004–2011

Blanton-Davis Ovarian Cancer Research Program Executive Committee, Member, 2004–2011

Faculty Celebration Steering Committee, Member, 2004

Gynecologic Oncology Center for Surgical Research (GOCSR), Member, 2004

Ovarian Working Group, Department of Gynecologic Oncology, Chairman, 2005–2011

Search Committee, Department of Nephrology Chair, Member, 2005

Gynecologic Oncology T32 - Program Steering Committee, Member, 2005

The University of Texas M. D. Anderson Cancer Center, Gynecologic Oncology Group (GOG), Co-Principal Investigator, 2005–2011

Faculty Celebration Gala, Chairman, 2005

Faculty Leadership Committee, Member, 2006–2011

Executive Committee of Faculty Senate, Member, 2007–2009

Faculty Senate Committee, Chair Elect, 2010–2011

Faculty Senate Committee, Chair, 2011 – 2012

Faculty Senate Committee, Member, 2006–2011

Gynecologic Oncology Committee for New Institute of Personalized Cancer Therapy, Head, 4/2008–2011

Award Nomination Selection Committee, 2010–2011

Clinical Research Counsel, Member, 6/2008–2011

Clinical Research Committee, Member, 7/2009–2011

Women Faculty Programs, Member, 8/2009–2011

Charitable Activities Committee Subcommittee, Member, 2010–2011

OPPE/FPPE, Department Safety Officer, 2/2010–2011

Institutional Review Board 1 (IRB1), Associate Member, 8/2010–2011

Vice Chair, Department of Oncology Services, BMDACC, 2011- 2014

BMDACC Perioperative Logistic Committee, 2011- 2014

BMDACC Surgery Committee, 2011- 2014

BMDACC Phase II Steering Committee, 2011-2014

Relationship Committee between UT MD Anderson Cancer Center and BMDACC, 2011- 2014

BMDACC Research Faculty Guidance Committee, 2011- 2014

Banner Medical Group Knowledge Management Committee, 2012- 2014

BMDACC, Affiliate of UTMACC for Gynecologic Oncology Group (GOG), Principal Investigator, 2012- 2014

BMDACC Biospecimen Governance Committee Chair 2013- 2014

BMDACC Research Committee, Co-chair 03/2013- 2014

Banner Health Oncology Steering Committee, 5-9/2014

**HONORS AND AWARDS**

Medical Honor Society, Alpha Omega Alpha, 1986

Galloway Fellowship in Gynecologic Oncology, Memorial Sloan Kettering Cancer Center, 1989

Best Doctors in America®, 2005–2006, 2006–2007, 2007–2008, 2011, 2013

**RESEARCH****Grants and Contracts (past 5 years)****Funded**

Principal Investigator-MDACC, J. S. Blanton Research Fund, J. S. Blanton Research Fund, 1999–2011, \$116,367

Principal Investigator, 10%, Gene Developmental in Ovarian Cancer, Specialized Program of Research Excellence, 2001– 2011, \$50,000

Principal Investigator, Gene Therapy Development Award, W. M. Keck Center for Cancer Gene Therapy Development Award, 2001– 2011, \$50,000

Principal Investigator, Texas Federation of Business Professional Women Award, Texas Federation of Business Professional Women Award, 2001– 2011, \$6,337

Principal Investigator, The Ovarian Cancer Survivors Fund, Don-Ray George &amp; Associates, 2003 – 2011, \$116,126

Co-Investigator, Efficacy and Mechanism of SERMs for Recurrent / Advanced Endometrial Cancer, Molecular Progression of Endometrial Cancer, P150CA098258, Specialized Program of Research Excellence, PI - Karen H. Lu, 9/1/2003 – 8/31/2008, \$992,019

Principal Investigator-MDACC, Gynecologic Oncology Center for Surgical Research (GOCSR), Houston Jewish Community Foundation, 2004 – 2011, \$50,000

Principal Investigator-MDACC, Susan G. Koch Ovarian Cancer Research Fund, Susan G. Koch, 2005 – 2011, \$50,000

Co-Investigator, The University of Texas M D Anderson Cancer Center, Gynecologic Oncology Group, Gynecologic Oncology Group, PI - Robert Coleman, M.D., 2005 – 2011.

**Pending**

N/A

**Other**

N/A

**Completed**

Principal Investigator, Evaluation of the Effect and Mechanism of Action of Adenovirus-mediated Tumor Suppressor Gene Therapy of Ovarian Cancer, Gynecologic Cancer Foundation, 1998–2006, \$25,000

Co-Investigator, Evaluating Fatigue and Other Symptoms of Ovarian cancer Patients with Ecological Momentary Assessment, Ovarian Cancer Research Development Award, PI - Karen Basen Engquist, Ph.D., 1999–2006, \$50,000

**Not Funded**

N/A

**Protocols**

**Funded**

Principal Investigator, Evaluating Fatigue and Other Symptoms of Ovarian Cancer Patients with Ecological Momentary Assessment, ID99-, 1999, Ovarian Cancer Research Development Award

Principal Investigator, A Phase II Study of Oral Xeloda Administered Twice Daily for Fourteen Days Every Three Weeks to Patients with Advanced Ovarian, Tubal or Peritoneal Cancer Refractory to Platinum and Taxanes, GYN 00-275, 2000–2001

Co-Principal Investigator, Phase II Evaluation of Oxaliplatin In Persistent or Recurrent Squamous Cell Carcinoma of the Cervix, GOG127P, PI - Charles Levenback, 2000–2003, GOG

Principal Investigator, A Phase 1 Dose Escalation Study of Intraperitoneal E1A Lipid Complex (1:3) with Combination Chemotherapy in Women with Epithelial Ovarian Cancer, ID 99-316, 2000–2006

Co-Principal Investigator, A Phase II Evaluation of Thalidomide (NSC #66847, IND #48832) In the Treatment of recurrent or Persistent Leiomyosarcoma of the Uterus, GOG231B, PI - Diane Bodurka, 2001–2002, GOG

Co-Principal Investigator, A Phase II Multicenter Study of Oral Xeloda Administered Twice Daily for Fourteen Days Every Three Weeks to Patients with Advanced or Recurrent Cervical Cancer, GYN01-080, PI - Lois Ramondetta, M.D., 2001–2003

Collaborator, A 2-Part Phase I/II Study of Extended Field External Irradiation and Intracavitary Brachytherapy combined with Chemo (Weekly Cisplatin-Arm 1) and Amifostine (Weekly Cisplatin and Amifostine-Arm 2), RTOG-C0116, PI - Anuja Jhingran, M.D., 2001– 2011, RTOG

Principal Investigator, A Phase I/II Study to Evaluate the Maximum Biologic Dose of Pegylated-Interferon (PEG- INTRON) in Patients with Platinum Resistant Ovarian, Peritoneal, or Fallopian Tube Cancer, ID02-115, 2002–2005, \$100,000, Integrated Therapeutics Group/Schering Plough

Collaborator, A Phase II Evaluation of Decetaxel and Gemcitabine Plus G-CSF in the treatment of recurrent of Persistent Leiomyosarcoma of the Uterus, GOG-0131G, PI - Lois Ramondetta, M.D., 2002–2005, GOG

Collaborator, A Phase II Evaluation of Liposomal Doxorubicin (Doxil) in the Treatment of Persistent or Recurrent Squamous Cell Carcinoma of the Cervix, GOG 127-R, PI - Diane Bodurka, M.D., 2002–2005, GOG

Co-Principal Investigator, Phase II Study of Irofulven (IND #48914) in Patients with Refractory or Recurrent Advanced Epithelial Ovarian Cancer Using Every-Other-Week Dosing, GYN01-486, PI - Diane Bodurka, 2002–2005

Collaborator, A Phase II Evaluation of Capecitabine (NSC#712807) in the Treatment of Persistent or Recurrent Non-squamous Cell Carcinoma of the Cervix, GOG-0128G, PI - Diane Bodurka, M.D., 2002– 2011, GOG

Collaborator, Treatment of Patients with Stage IB2 Carcinoma of the Cervix: A Randomized Comparison of Radical Hysterectomy and Tailored Chemo-Radiation versus Chemo-radiation, GOG0201, PI - Charles Levenback, M.D., 2003–2005, GOG

Collaborator, A Randomized Study of Tamoxifen versus Thalidomide (NSC no.66847) in Patients with Biochemical-Recurrence- Only Epithelial Ovarian Cancer of the Fallopian Tube, and Primary Peritoneal Carcinoma after First-Line Chemotherapy, GOG-0198, PI - Robert Coleman, M.D., 2003–2006, GOG

Collaborator, A Phase I/II Study of COX-2 Inhibitor, Celebrex (Celecoxib), and Chemoradiation in Patients with Locally Advanced Cervical Cancer, RTOG-C0128, PI - Patricia Eifel, M.D., 2003–2011, RTOG

Principal Investigator, A Phase I/II Study of Gleevec/Taxol in Patients with Newly Diagnosed Stage IIIC or IV or Recurrent (any stage) Uterine Papillary Serous Carcinoma (UPSC), GYN03-0177, 2003–2011, Novartis

Collaborator, A Phase III Clinical Trial of Tisseel VH Fibrin Sealant to Reduce Lymphedema Incidence after Inguinal Lymph Node Dissection Performed in the Management of Vulvar Malignancies, GOG195, PI - Pedro Ramirez, M.D., 2003–2011, GOG

Collaborator, A Phase III Randomized Clinic Trial of Laparoscopic Pelvic & Para-Aortic Node Sampling with Vaginal Hysterectomy and BSO versus Open Laparotomy with Pelvic and Para-Aortic Node Sampling and Abdominal Hysterectomy and BSO in Endometrial

Adenocarcinoma and Uterine Sarcoma, GOG-LAP2, PI - Pedro Ramirez, M.D., 2003–2011, GOG

Collaborator, A Phase III Randomized Trial of Paclitaxel and Carboplatin versus Triplet or Sequential Doublet Combinations in Patients with Epithelial Ovarian or Primary Peritoneal Cancer, GOG-0182, PI - John Kavanagh, M.D., 2003–2011, GOG

Collaborator, A Randomized Phase III Study of Paclitaxel plus Cisplatin versus Vinorelbine Plus Cisplatin versus Gemcitabine Plus Cisplatin versus Topotecan Plus Cisplatin in Stage IVB, Recurrent or Persistent Carcinoma of the Cervix, GOG-0204, PI - Charles Levenback, M.D., 2003–2011, GOG

Principal Investigator, Phase I/II Study of Weekly Topotecan and Iressa in Patients with Platinum-Resistant Ovarian/Peritoneal/Fallopian Tube Cancer, 2003-0322, 2004–2007, \$92,500, GlaxoSmithKline/Astra Zeneca

Principal Investigator, A Phase I/II Randomized Study of Intraperitoneal tDCC-E1A and Intravenous Paclitaxel in Women with Platinum-Resistant Ovarian Cancer, ID02-321, 2004–2011, \$365,000, Marcus Foundation Funds-UT M. D. Anderson Cancer Center

Principal Investigator, A Phase II Study of RAD001 in Patients with Recurrent Endometrial Cancer, 2004-0002 IND 69277, 2004–2011, \$111,300, Novartis

Collaborator, A Randomized, Phase II Trial of Doxorubicin/Cisplatin/Paclitaxel and G-CSF versus Carboplatin/Paclitaxel in Patients with Stage III and IV or Recurrent Endometrial Cancer, GOG-0209, PI - Lois Ramondetta, M.D., 2004–2011, GOG

Mentor, Training Grant - Department of Gynecologic Oncology, Training of Academic Gynecologic Oncologists, NIH/NCI, 1 T32CA101642-01A, PI - David M. Gershenson, MD, 2005–2010, \$1,535,549 (\$181,757/year), NIH/NCI

Collaborator, A Limited Access Phase II Trial of Cetuximab (C225, NSC 714692) in Combination with Cisplatin (NSC #119875) in the Treatment of Advanced, Persistent, or Recurrent Carcinoma of the Cervix, GOG-0076DD, PI - Robert Coleman, M.D., 2005–2011, GOG

Principal Investigator, A Phase I Trial of Tailored Radiation Therapy with Concomitant Cetuximab (C225, NSC# 714692) and Cisplatin (NSC# 119875) in the Treatment of Patients with Cervical Cancer, GOG-9918, 2005–2011, GOG  
Collaborator, A Phase II Evaluation of Pemetrexed (Alimta, LY231514, IND #40061) in the Treatment of Recurrent Carcinoma of the Cervix, GOG-0127T, PI - Charles Levenback, M.D., 2005–2011, GOG  
Collaborator, A Phase II Evaluation of Thalidomide (NSC# 66847, IND# 48832) In The Treatment Of Recurrent Or Persistent Carcinosarcoma of the Uterus, GOG-0230B, PI - Lois Ramondetta, M.D., 2006–2007, GOG  
Principal Investigator, A Dose-Escalating Phase I Study with an Expanded Cohort to Assess Feasibility of Intraperitoneal Carboplatin & Intravenous Paclitaxel in Patients with Previously Untreated Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Cancer, GOG-9917, 2006–2011, GOG  
Collaborator, A Phase II Evaluation of Pemetrexed (Alimta, LY231514, IND #40061) in the Treatment of Recurrent or Persistent Platinum-Resistant Ovarian or Primary Peritoneal Carcinoma, GOG-0126Q, PI - Siqing Fu, M.D., 2006–2011, GOG  
Co-Principal Investigator, A Phase II Study of Faslodex in Recurrent/Metastatic Endometrial Carcinoma, GOG-0188, PI - Lois Ramondetta, M.D., 2006–2011, GOG  
Co-Principal Investigator, Phase III Carboplatin & Paclitaxel + Placebo vs. Carboplatin & Paclitaxel + Concurrent Bevacizumab (NSC #704865, IND # 7921) follow by Placebo, vs Carboplatin & Paclitaxel + Concurrent & Ext Bevacizumab, in Advanced Stage Epithelial Ovarian & Peritoneal Primary Cancer, GOG-0218, PI - Robert Coleman, M.D., 2006–2011, GOG  
Collaborator, A Phase II Evaluation of ABI-007 (IND #55,974) in the Treatment of Persistent or Recurrent Squamous or Non Squamous Cell Carcinoma of the Cervix (Abraxis BioScience, Inc. Study #CA026) (Group B), GOG-0127V, PI - Robert Coleman, M.D., 2007–2011, GOG  
Principal Investigator, Preliminary Evaluation of Femara (Letrozole) for Adjuvant Treatment After Completion of First-Line Chemotherapy for Patients with Optimally Debulked and Chemoresponsive Ovarian Cancer, IRB 2006-0689, 2007–2011, \$314,989

Principal Investigator, Randomized Phase 2 Study of MLN8237, an Aurora A Kinase Inhibitor, Plus Weekly Paclitaxel or Weekly Paclitaxel Alone in Patients with Recurrent Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer, Preceded by a Phase 1 Portion in Patients with Ovarian or Breast Cancer, Millennium.

#### Unfunded

Collaborator, A Phase II Study of Intravenously Administered Tirapazamine Plus Cisplatin in Subjects with Cervical Cancer, GYN96-136, PI - Charles Levenback, M.D., 1996–2004  
Principal Investigator, Phase I Study of recurrent ovarian cancer Adp53, ID 97-288, 1997  
Collaborator, Telomerase Testing in Peritoneal Washings from Ovarian Cancer Patients Undergoing Second Look Laparotomy, LAB98-080, PI - David Gershenson, M.D., 1998–2005  
Collaborator, A Pilot Study of Transfusion of rhTPO-Derived Autologous Platelets Cryopreserved with Thromobosol and 2% DMSO in Patients with Gynecologic Malignancy Receiving Carboplatin, GYN97-310, PI - Saroj Vadhan, 1999–2004  
Collaborator, Paclitaxel, Carboplatin, and Herceptin for Patients with Untreated Advanced, (Cohort A) or Recurrent Platinum-Sensitive (Cohort B) Epithelial Ovarian Cancer, Peritoneal Cancer, or Fallopian Tube Cancer, GYN99-067, PI - David Gershenson, M.D., 1999–2004  
Collaborator, Paclitaxel, Carboplatin, and Herceptin for Patients with Untreated Advanced Epithelial Ovarian Cancer, Peritoneal Cancer, or Fallopian Tube Cancer, GYN99-132, PI - David Gershenson, M.D., 1999–2007  
Collaborator, Feasibility of Measuring Gene Expression Patterns Using Tissue Acquisition of Primary Stage III and IV Epithelial Ovarian Cancer, Fallopian Tube, or Primary Peritoneal Cancer and Gene Expression Array Technology for Predicting Paclitaxel Chemotherapy Sensitivity and Resistance, ID00-408, PI - David Gershenson, M.D., 2000–2011  
Principal Investigator, Phase II Study of Paclitaxel for Ovarian Stromal Tumors as First-Line or Second-Line Therapy, GOG-0187, 2000  
Collaborator, A Phase II Study of Intraperitoneal E1A-Lipid complex for Patients with Advanced Epithelial Ovarian CX without Her-2/Neu Overexpression, ID00-306, PI - Naoto Ueno, 2001–2002  
Collaborator, Phase II Study of Intraperitoneal Recombinant Human Interleukin-12 (RHIL-12) in Patients with Peritoneal Carcinomatosis (Residual Disease <1cm) Associated with Ovarian epithelial CX or Primary Peritoneal Carcinoma, ID00-232, PI - Renato Lenzi, 2001–2005  
Collaborator, Feasibility Study of Intraoperative Lymphatic Mapping and Sentinel Lymph Node Identification in Patients with Endometrial Cancer, ID01-290, PI - Diane Bodurka, M.D., 2001–2006  
Collaborator, A Phase II Multicenter Trial of Paclitaxel and Carboplatin in Women with Advanced (IIb, IIc, IVa and IVb) or Recurrent (All Stages) Mixed Malignant Mullerian Tumors (MMMT) of the Uterus, ID01-229, PI - Lois Ramondetta, M.D., 2001–2011  
Collaborator, A Phase II Study: Paclitaxel and Pelvic Radiation for Stage I-IIIA Papillary Serous Carcinoma of the Endometrium, ID-418, PI - Anuja Jhingran, 2001–2011  
Collaborator, Chemotherapy-Related Toxicities in Ovarian Cancer Patients: Preference Assessments of Patients, Family Members, Ancillary Staff and Gynecologic Oncologists, and Patients' Quality of Life, GYN00-409, PI - Diane Bodurka, M.D., 2001–2011  
Collaborator, Clinical and Molecular Genetic Determinants of Late Complication in Patients Treated with Radiation Therapy for Cervical Cancer, LAB01-380, PI - Patricia Eifel, M.D., 2001–2011  
Collaborator, Evaluating Fatigue and Other Symptoms of Ovarian Cancer Patients with Ecological Momentary Assessment, ID00-013, PI - Karen Basen-Engquist, 2001–2011  
Collaborator, Phase II Study of Mifepristone (RU-486) in the Treatment of PR Positive Advanced/Recurrent Endometrial Adenocarcinoma and Low Grade Endometrial Stromal Sarcoma (LGESS), ID01-212, PI - Lois Ramondetta, M.D., 2001–2011  
Collaborator, Use of the CA125 Algorithm for the Early Detection of Ovarian Cancer in Low Risk Women, ID01-022, PI - Karen Lu, 2001–2011  
Co-Principal Investigator, Vacuum-Assisted Closure in the treatment of Gynecologic Oncology Wound Failures, RCR01-156, PI - Pedro Ramirez, 2002–2003  
Collaborator, Phase I Trial of Concurrent Weekly CPT-11, Cisplatin, and Radiotherapy for Patients with Newly Diagnosed Stage IIb-IVa Cancer of the Uterine Cervix, ID02-526, PI - Pedro Ramirez, M.D., 2002–2005  
Collaborator, A Phase II Study of Chemoimmunotherapy for Patients with Potentially Platinum Sensitive Müllerian (Epithelial Ovarian, Peritoneal, or Fallopian Tube) Carcinomas, ID02-231, PI - Ralph Freedman, M.D., Ph.D., 2002–2011  
Collaborator, A Prevalence Study of HNPCC Gene Mutation in Women with Endometrial Cancers, ID01-533, PI - Karen Lu, M.D., 2002–2011  
Collaborator, Feasibility of Measuring Gene Expression Patterns Using Tissue Acquisition of Primary Peritoneal CX and Gene Expression Array Technology for Predicting Paclitaxel Chemo Sensitive and Resistant, ID00-408, PI - David M. Gershenson, M.D., 2002–2011  
Collaborator, Modulation of Putative Surrogate Endpoint Biomarkers in Endometrial Biopsies from Women with HNPCC, ID01-340, PI - Karen Lu, M.D., 2002–2011  
Collaborator, The Utility and Impact of Computed Tomography and Serum CA-125 in the Management of Newly Diagnosed Ovarian Cancer, ID02-143, PI - Pedro Ramirez, M.D., 2002–2011

Co-Principal Investigator, Evaluation of Molecular Markers in Malignant Mixed Mesodermal Tumors (MMMT) of the Ovary, LAB03-0653, PI - Lois Ramondetta, M.D., 2003-2005  
Co-Principal Investigator, A Phase I Study Evaluating the Safety and Tolerability of PS-341(Bortezomib) and Carboplatin in Patients with Platinum Resistant Recurrent Ovarian Cancer, Primary Peritoneal Cancer, and Fallopian Tube Cancer, ID02-114, PI - Pedro Ramirez, 2003-2007  
Collaborator, Phase III Randomized Study of TLK286 Versus Doxil/Caelyx or Hycamtin as Third-Line Therapy in Platinum Refractory or Resistant Ovarian Cancer, ID03-184, PI - John Kavanagh, M.D., 2003-2007  
Co-Principal Investigator, Role of Secondary Cytoreductive Surgery for Recurrent Ovarian: A 20-Year Experience, RCR03-0803, PI - Pedro Ramirez, 2003-2007  
Collaborator, A Phase II Study Evaluating the Utility of Letrozole in the Treatment of Recurrent, Estrogen Receptor (ER) Positive, Epithelial Ovarian Cancer, Fallopian Tube Cancer, and Primary Peritoneal Cancer, ID02-698, PI - Pedro Ramirez, M.D., 2003-2011  
Collaborator, A Pilot Study of Laparoscopic Extraperitoneal Lymph Node Dissection in Patients with Locally Advanced Cervical Cancer, ID03-0098, PI - Pedro Ramirez, M.D., 2003-2011  
Collaborator, Phase 1-2a Dose-Ranging Study of TLK286 in Combination with Doxil in Platinum Refractory or Resistant Ovarian Cancer, ID02-571, PI - John Kavanagh, M.D., 2003-2011  
Collaborator, Phase II Study of Letrozole in Patients with Recurrent Advanced Borderline Tumors or Low Grade Epithelial Cancers of the Ovary, Fallopian Tube and Primary Peritoneum, 2003-0486, PI - John Kavanagh, M.D., 2003-2011  
Collaborator, Quality of Life and Preferences of Ovarian Cancer Patients Enrolled on a Randomized Trial of High-Dose versus Conventional Dose Chemotherapy, ID02-680, PI - Charlotte Sun, Ph.D., 2003-2011  
Co-Principal Investigator, A Phase II Study of Gemcitabine and Cisplatin for Advanced or Recurrent Endometrial Cancer, 2003-0823, PI - Jubilee Brown, M. D., 2004-2011  
Collaborator, Chemoradiation-Induced Nausea and Emesis: A Prospective Study to Assess Patient Preferences and Quality of Life, 200-0529, PI - Charlotte Sun, Ph.D., 2004-2011  
Collaborator, The Role of Appendectomy at the Time of Tumor Reductive Surgery in Patients with Epithelial Ovarian Cancer, RCR05-0630, PI - Pedro Ramirez, M.D., 2005  
Collaborator, Total Laparoscopic Radical Hysterectomy: Outcomes Evaluation, RCR05-0390, PI - Pedro Ramirez, M.D., 2005-2007  
Co-Principal Investigator, A Pilot Clinical Trial with Molecular Marker Study of Chemosensitization to Carboplatin by Use of Vidaza in Platinum Resistant or Refractory Epithelial Ovarian Cancer, 2005-0009, PI - Siqing Fu, M.D., 2005-2011  
Collaborator, Evaluation of Demographics and Perioperative Care of Patients Undergoing Laparoscopic Surgery for Gynecologic Malignancies: A 15-Year Experience, RCR05-0137, PI - Pedro Ramirez, M.D., 2005-2011  
Collaborator, Systemic Antineoplastic Therapy in Ovarian Cancer Patients with Renal Dysfunction, RCR05-0707, PI - John Kavanagh, M.D., 2005-2011  
Collaborator, A Phase I Dose Escalation Study of ABI-007 with Carboplatin as First-Line Therapy in Patients with Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Carcinoma, 2006-0405, PI - Robert Coleman, M.D., 2006-2011  
Principal Investigator, Phase II Study of Cetuximab (Erbix) in Patients with Progressive or recurrent Endometrial Cancer, 2006-0211, 2006-2011  
Collaborator, A Multi-Institutional Study of Proteomic Evaluation of Epithelial Ovarian Cancer, Primary Peritoneal Cancer, and Fallopian Tube Cancer Patients in First Clinical Remission: Development of a Protein Fingerprint Profile of Relapse, 2005-0780, PI - Karen Lu, M.D., 2007-2011  
Co-Principal Investigator, A Phase II, Open-Label, Non-Comparative, International, MC Study to Assess the Efficacy and Safety of KU-0059436 Given Orally Twice Daily in Patients with Advanced BRCA1-or BRCA2-Associated Ovarian Cancer, 2007-0098, PI - Karen H. Lu, M.D., 2007-2011  
Collaborator, A Study of the Efficacy of MORAb-003 in Subjects with Platinum-Sensitive Epithelial Ovarian Cancer in First Relapse, 2006-0889, PI - Robert Coleman, M.D., 2007-2011  
Collaborator, Phase I/II and Pharmacokinetic Study of Docetaxel Plus VEGF Trap (AVE0005, NSC #724770) In Patients with Recurrent Ovarian, Primary Peritoneal, and Fallopian Tube Cancer, 2006-0329, PI - Robert Coleman, M.D., 2007-2011

## **Patents and Technology Licenses**

### **Patents**

N/A

### **Technology Licenses**

N/A

## **Grant Reviewer/Service on Study Sections**

Review Committee on NIH CTRC, NIH, Member, Louisiana State University, 1997  
AD HOC on NCI P01, NCI, Ad Hoc Member, Tulane University Health Science Center, 2004  
Clinical Research Review Committee NCI, NCI, Member, Mayo Clinic, 2004  
NIH-CONC Clinical Oncology Study Section Review (R01, R21), NIH, Member, Clinical Oncology Study Section Review (R01, R21), San Francisco, CA, 2004  
Review Committee NCI-NIH, NIH, Member, Duke Comprehensive Cancer Center, Duke University, 2004  
Review Committee on NCI-I Career Awards, NCI, Member, 2004  
NCI PO1 Cluster Review, NIH, Member, Bethesda, MD, 2005  
NIH-CONC Clinical Oncology Study Section Review (R01, R21), NIH, Member, Clinical Oncology Study Section Review (R01, R21), Bethesda, MD, 2005  
Review Committee NCI-NIH, PO1 Experimental Therapeutics II Cluster Review, NIH, Member, PO1 Experimental Therapeutics II Cluster Review, Rockville, MD, 2005

## **PUBLICATIONS**

### **Peer-Reviewed Original Research Articles**

1. Yu D, **Wolf JK**, Scanlon M, Price JE, Hung MC. Enhanced c-erbB-2/neu expression in human ovarian cancer cells correlates with more severe malignancy that can be suppressed by E1A. *Cancer Res* 1993 Feb 15;53(4):891-8.
2. Hamada K, Zhang WW, Alemany R, Roth JA, **Wolf JK**, Mitchell MF. Gene therapy of cervical cancer by adenovirus-mediated p53 gene transfer. *J Cell Biochem Suppl* 1995; 21A:421.
3. Gershenson DM, Morris M, Burke TW, Levenback C, **Wolf JK**, Warner D, Matthews CM, Wharton JT. Treatment of poor-prognosis sex cord-stromal tumors of the ovary with the combination of bleomycin, etoposide, and cisplatin(BEP). *Obstet Gynecol* 1996 Apr;87(4):527-31.

4. **Wolf JK**, Levenback C, Malpica A, Morris M, Burke T, Mitchell MF. Adenocarcinoma in situ of the cervix: significance of cone biopsy margins. *Obstet Gynecol* 1996 Jul; 88(1)(1):82-6.
5. Levenback C, Morris M, Burke TW, Gershenson DM, **Wolf JK**, Wharton JT. Groin dissection practices among gynecologic oncologists treating early vulvar cancer. *Gynecol Oncol* 1996 Jul; 62(1)(1):73-7.
6. Hamada K, Zhang WW, Alemany R, **Wolf JK**, Roth JA, Mitchell MF. Growth inhibition of human cervical cancer cells with recombinant adenovirus p53 in vitro. *Gynecol Oncol* 1996;60(3):373-379.
7. Mitchell MF, Hamada K, Jagannadha S, Satterfield WC, Buchholz S, **Wolf JK**, Zhang WU, Alemany R, Tortolero-Luna G, Keeling ME, Wharton JT, Roth JR. Transgene expression in the rhesus cervix mediated by an adenovirus expressing b-galactosidase. *Am J Obstet Gynecol* 1996;174:1094-1101.
8. Brader KR, **Wolf JK**, Hung MC, Yu D, Crispens MA, van Golen KL, Price JE. Adenovirus E1A expression enhances the sensitivity of an ovarian cancer cell line to multiple cytotoxic agents through an apoptotic mechanism. *Clin Cancer Res* 1997 Nov; 3(11):2017-24.
9. Gershenson DM, Silva EG, Levy L, Burke TW, **Wolf JK**, Tornos C. Ovarian serous borderline tumors with invasive peritoneal implants. *Cancer* 1998 Mar; 82(6)(6):1096-103.
10. Brader KR, **Wolf JK**, Chakrabarty S, Price JE. Epidermal growth factor receptor (EGFR) antisense transfection reduces the expression of EGFR and suppresses the malignant phenotype of a human ovarian cancer cell line. *Oncol Rep* 1998 Sep-Oct; 5(5):1269-74.
11. Price JE, **Wolf JK**, Pathak S. Distinctive karyotypes and growth patterns in nude mice reveal cross-contamination in an established human cancer cell line. *Oncol Rep* 1998 Jan-Feb; 5(1)(1):261-6.
12. **Wolf JK**, Kim TE, Fightmaster D, Bodurka D, Gershenson DM, Mills G, Wharton JT. Growth suppression of human ovarian cancer cell lines by the introduction of a p16 gene via a recombinant adenovirus. *Gynecol Oncol* 1999 Apr; 73(1)(1):27-34.
13. **Wolf JK**, Mullen J, Eifel PJ, Burke TW, Levenback C, Gershenson DM. Radiation treatment of advanced or recurrent granulosa cell tumor of the ovary. *Gynecol Oncol* 1999 Apr; 73(1):35-41.
14. **Wolf JK**, Mills GB, Bazzet L, Bast RC, Roth JA, Gershenson DM. Adenovirus-mediated p53 growth inhibition of ovarian cancer cells is independent of endogenous p53 status. *Gynecol Oncol* 1999 Nov; 75(2)(2):261-6.
15. Gershenson DM, Morris M, Burke TW, Levenback C, **Wolf JK**, Lee JJ, Thall PF, Atkinson EN, Silva EG, Wharton JT. A phase I trial of intravenous melphalan, paclitaxel, and cisplatin plus granulocyte-colony stimulating factor in patients with suboptimal advanced epithelial ovarian carcinoma or peritoneal carcinoma. *Cancer* 1999 Dec;86(11):2291-300.
16. Bodurka-Bevers, Basen-Engquist KM, Fitzgerald MA, Bevers MW, **Wolf JK**, Levenback C, Gershenson DM. Depression may worsen quality of life in patients with epithelial ovarian cancer. *Gynecol Oncol* 1999;72:449.
17. Bodurka-Bevers D, Basen-Engquist K, Carmack CL, Fitzgerald MA, **Wolf JK**, de Moor C, Gershenson DM. Depression, anxiety, and quality of life in patients with epithelial ovarian cancer. *Gynecol Oncol* 2000 Sep; 78(3)(3 Pt 1):302-8.
18. Parker LP, **Wolf JK**, Price JE. Adenoviral-mediated gene therapy with Ad5CMVp53 and Ad5CMVp21 in combination with standard therapies in human breast cancer cell lines. *Ann Clin Lab Sci* 2000 Oct; 30(4)(4):395-405.
19. Gordinier ME, Ramondetta LM, Parker LP, **Wolf JK**, Follen M, Gershenson DM, Bodurka-Bevers D. Survey of female gynecologic oncologists and fellows: balancing professional and personal life. *Gynecol Oncol* 2000 Nov; 79(2)(2):309-14.
20. Ramondetta L, Mills GB, Burke TW, **Wolf JK**. Adenovirus-mediated expression of p53 or p21 in a papillary serous endometrial carcinoma cell line (SPEC-2) results in both growth inhibition and apoptotic cell death: potential application of gene therapy to endometrial cancer. *Clin Cancer Res* 2000 Jan; 6(1)(1):278-84.
21. Donato, Gershenson D, Ippoliti C, Wharton JT, Bast Jr RC, Aleman A, Anderlini P, Gajewski JG, Giralt S, Molldrem J, Ueno N, Lauppe J, Korbiling M, Boyer J, Bodurka-Bevers D, Bevers M, Burke T, Freedman R, Levenback C, **Wolf JK**, Champlin RE. High-dose ifosfamide and etoposide with filgrastim for stem cell mobilization in patients with advanced ovarian cancer. *Bone Marrow Transplant* 2000; 25(11):1137-1140.
22. Verschraegen, Levenback C, Vincent M, **Wolf JK**, Bevers M, Loyer E, Kudelka AP, Kavanagh JJ. Phase II study of intravenous DX-8951f in patients with advanced ovarian, tubal, or peritoneal cancer refractory to platinum, taxane, and topotecan. *Annals NY Acad Sci* 2000;922:349-51.
23. Munkarah A, Levenback C, **Wolf JK**, Bodurka-Bevers D, Tortolero-Luna G, Morris RT, Gershenson DM. Secondary cytoreductive surgery for localized intra-abdominal recurrences in epithelial ovarian cancer. *Gynecol Oncol* 2001 May; 81(2):237-41.
24. Modesitt SC, Ramirez P, Zu Z, Bodurka-Bevers D, Gershenson D, **Wolf JK**. In vitro and in vivo adenovirus-mediated p53 and p16 tumor suppressor therapy in ovarian cancer. *Clin Cancer Res* 2001 Jun; 7(6):1765-72.
25. Hortobagyi GN, Ueno NT, Xia W, Zhang S, **Wolf JK**, Putnam JB, Weiden PL, Willey JS, Carey M, Branham DL, Payne JY, Tucker SD, Bartholomeusz C, Kilbourn RG, De Jager RL, Sneige N, Katz RL, Anklesaria P, Ibrahim NK, Murray JL, Theriault RL, Valero V, Gershenson DM, Bevers MW, Huang L, Lopez-Berestein G, Hung MC. Cationic liposome-mediated E1A gene transfer to human breast and ovarian cancer cells and its biologic effects: a phase I clinical trial. *J Clin Oncol* 2001 Jul 15;19(14)(14):3422-33.
26. Ramirez PT, Levenback C, Burke TW, Eifel P, **Wolf JK**, Gershenson DM. Sigmoid perforation following radiation therapy in patients with cervical cancer. *Gynecol Oncol* 2001 Jul;82(1):150-5.
27. Donato ML, Gershenson DM, Wharton JT, Ippoliti CM, Aleman AS, Bodurka-Bevers D, Bevers MW, Burke TW, Levenback CF, **Wolf JK**, Freedman RS, Bast RC, Gajewski JL, Champlin RE. High-dose topotecan, melphalan, and cyclophosphamide (TMC) with stem cell support: a new regimen for the treatment of advanced ovarian cancer. *Gynecol Oncol* 2001 Sep;82(3)(3):420-6.
28. Robinson JB, Singh D, Bodurka-Bevers DC, Wharton JT, Gershenson DM, **Wolf JK**. Hypersensitivity reactions and the utility of oral and intravenous desensitization in patients with gynecologic malignancies. *Gynecol Oncol* 2001 Sep; 82(3):550-8.
29. Levenback C, Coleman RL, Burke TW, Bodurka-Bevers D, **Wolf JK**, Gershenson DM. Intraoperative lymphatic mapping and sentinel node identification with blue dye in patients with vulvar cancer. *Gynecol Oncol* 2001 Nov;83(2)(2):276-81.
30. Ramirez PT, Gershenson DM, Tortolero-Luna G, Ramondetta LM, Fightmaster D, Wharton JT, **Wolf JK**. Expression of cell-cycle mediators in ovarian cancer cells after transfection with p16(INK4a), p21(WAF1/Cip-1), and p53. *Gynecol Oncol* 2001 Dec; 83(3)(3):543-8.
31. Parker LP, Ramirez PT, Broadus R, Sightler S, **Wolf JK**. Low-grade ovarian cancer in an adolescent patient. *Gynecol Oncol* 2001 Jan;80(1)(1):104-6.
32. Ramirez PT, Modesitt SC, Morris M, Edwards CL, Bevers MW, Wharton JT, **Wolf JK**. Functional outcomes and complications of continent urinary diversions in patients with gynecologic malignancies. *Gynecol Oncol* 2002 May; 85(2)(2):285-91.
33. Dalrymple JL, Levenback C, **Wolf JK**, Bodurka DC, Garcia M, Gershenson DM. Trends among gynecologic oncology inpatient deaths: is end-of-life care improving? *Gynecol Oncol* 2002 May;85(2):356-61.

34. Tedjarati S, Baker CH, Apte S, Huang S, **Wolf JK**, Killion JJ, Fidler IJ. Synergistic therapy of human ovarian carcinoma implanted orthotopically in nude mice by optimal biological dose of pegylated interferon alpha combined with paclitaxel. *Clin Cancer Res* 2002 Jul;8(7):2413-22.
35. Ramirez PT, **Wolf JK**, Malpica A, Deavers MT, Liu J, Broaddus R. Wolffian duct tumors: case reports and review of the literature. *Gynecol Oncol* 2002 Aug;86(2):225-30.
36. Modesitt SC, Tortolero-Luna G, Robinson JB, Gershenson DM, **Wolf JK**. Ovarian and extraovarian endometriosis-associated cancer. *Obstet Gynecol* 2002 Oct;100(4):788-95.
37. Tanyi, Lapushin R, Eder A, Auersperg N, Tabassam FH, Roth JA, Gu J, Fang B, Mills GB, **Wolf JK**. Identification of tissue and cancer selective promoters for the introduction of genes into human ovarian cancer cells. *Gynecol Oncol* 2002;85(3):451-458.
38. Bodurka DC, Levenback C, **Wolf JK**, Gano J, Wharton JT, Kavanagh JJ, Gershenson DM. Phase II trial of irinotecan in patients with metastatic epithelial ovarian cancer or peritoneal cancer. *J Clin Oncol* 2003 Jan 15;21(2):291-7.
39. Tanyi JL, Morris AJ, **Wolf JK**, Fang X, Hasegawa Y, Lapushin R, Auersperg N, Sigal YJ, Newman RA, Felix EA, Atkinson EN, Mills GB. The human lipid phosphate phosphatase-3 decreases the growth, survival, and tumorigenesis of ovarian cancer cells: validation of the lysophosphatidic acid signaling cascade as a target for therapy in ovarian cancer. *Cancer Res* 2003 Mar 1;63(5):1073-82.
40. Huh JJ, **Wolf JK**, Fightmaster DL, Lotan R, Follen M. Transduction of adenovirus-mediated wild-type p53 after radiotherapy in human cervical cancer cells. *Gynecol Oncol* 2003 May;89(2):243-50.
41. Shvartsman HS, Lu KH, Lee J, Lillie J, Deavers MT, Clifford S, **Wolf JK**, Mills GB, Bast RC, Jr, Gershenson DM, Schmandt R. Overexpression of kallikrein 10 in epithelial ovarian carcinomas. *Gynecol Oncol* 2003 Jul;90(1):44-50.
42. Ramondetta LM, Burke TW, Jhingran A, Schmandt R, Bevers MW, **Wolf JK**, Levenback CF, Broaddus R. A phase II trial of cisplatin, ifosfamide, and mesna in patients with advanced or recurrent uterine malignant mixed müllerian tumors with evaluation of potential molecular targets. *Gynecol Oncol* 2003 Sep;90(3):529-36.
43. Gordinier ME, Malpica A, Burke TW, Bodurka DC, **Wolf JK**, Jhingran A, Ramirez PT, Levenback C. Groin recurrence in patients with vulvar cancer with negative nodes on superficial inguinal lymphadenectomy. *Gynecol Oncol* 2003 Sep;90(3):625-8.
44. Tanyi JL, Hasegawa Y, Lapushin R, Morris AJ, **Wolf JK**, Berchuck A, Lu K, Smith DI, Kalli K, Hartmann LC, McCune K, Fishman D, Broaddus R, Cheng KW, Atkinson EN, Yamal JM, Bast RC, Felix EA, Newman RA, Mills GB. Role of decreased levels of lipid phosphate phosphatase-1 in accumulation of lysophosphatidic acid in ovarian cancer. *Clin Cancer Res* 2003 Sept 1;9(10 pt 1):3534-45.
45. Ramirez PT, **Wolf JK**, Levenback C. Laparoscopic port-site metastases: etiology and prevention. *Gynecol Oncol* 2003 Oct;91(1):179-89.
46. Trimble, Bell M, **Wolf JK**, Alvarez R. Grantsmanship and career development for gynecologic cancer investigators. *Cancer S* 2003;98(9):2075-2082.
47. Ramondetta LM, Bodurka DC, Tortolero-Luna G, Gordinier M, **Wolf JK**, Gershenson DM, Sciscione AC. Mentorship and productivity among gynecologic oncology fellows. *J Cancer Educ* 2003 Spring 18(1):15-9.
48. Fracasso, Blessing JA, **Wolf JK**, Rocereto TF, Berek JS, Waggoner S. Phase II evaluation of oxaliplatin in previously treated squamous cell carcinoma of the cervix: A Gynecologic Oncology Group Study. *Gynecol Onc* 2003; 90:177-80.
49. Schimp VL, Worley C, Brunello S, Levenback CC, Wolf JK, Sun CC, Bodurka DC, Ramirez PT. Vacuum-assisted closure in the treatment of Gynecologic Oncology wound failures. *Gynecol Oncology*. 2004 Feb; 92(2):586-91. doi: 10.106/j.ygyno.2003.10.055.PMID: 14766251
50. Donato ML, Aleman A, Champlin RE, Saliba RM, Wharton JT, Burke TW, Bodurka DC, Bevers MW, Levenback CF, **Wolf JK**, Bast RC, Freedman RS, Ippoliti C, Brewer M, Gajewski JL, Gershenson DM. Analysis of 96 patients with advanced ovarian carcinoma treated with high-dose chemotherapy and autologous stem cell transplantation. *Bone Marrow Transplant* 2004 Jun;33(12):1219-24.
51. **Wolf JK**, Bodurka DC, Gano JB, Deavers M, Ramondetta L, Ramirez PT, Levenback C, Gershenson DM. A phase I study of Adp53 (INGN 201; ADVEXIN) for patients with platinum- and paclitaxel-resistant epithelial ovarian cancer. *Gynecol Oncol* 2004 Aug;94(2):442-8.
52. Ramirez PT, Frumovitz M, **Wolf JK**, Levenback C. Laparoscopic port-site metastases in patients with gynecological malignancies. *Int J Gynecol Cancer* 2004 Nov-Dec;14(6):1070-7.
53. Smith JA, Brown J, Martin MC, Ramondetta LM, **Wolf JK**. An in vitro study of the inhibitory activity of gemcitabine and platinum agents in human endometrial carcinoma cell lines. *Gynecol Oncol* 2004 Jan;92(1):314-9.
54. Christen, Muller P, Wathen K, **Wolf JK**. Bayesian randomized clinical trials: A decision-theoretic sequential design. *Can J Stat* 2004; 32(4):387-402.
55. Frumovitz, Ramirez PT, Greer M, Gregurich MA, **Wolf JK**, Bodurka DC, Levenback C. Laparoscopic training and practice in gynecologic oncology among Society of Gynecologic Oncologists members and fellows-in-training. *Gynecol Oncol* 2004; 94:746-753.
56. Sun CC, Bodurka DC, Weaver CB, Rasu R, **Wolf JK**, Bevers MW, Smith JA, Wharton JT, Rubenstein EB. Rankings and symptom assessments of side effects from chemotherapy: insights from experienced patients with ovarian cancer. *Support Care Cancer* 2005 Apr;13(4):219-27. e-Pub 2004 Nov 9.
57. Sood AK, Abu-Rustum NR, Barakat RR, Bodurka DC, Brown J, Donato ML, Poyner EA, **Wolf JK**, Gershenson DM. Fifth International Conference on Ovarian Cancer: challenges and opportunities. *Gynecol Oncol* 2005 Jun; 97(3):916-23.
58. Jenkins AD, Ramondetta LM, Sun C, Johnston T, **Wolf JK**, Bodurka DC, Brown J, Atkinson EN, Levenback C. Phase II trial of capecitabine in recurrent squamous cell carcinoma of the cervix. *Gynecol Oncol* 2005 Jun;97(3):840-4.
59. Sood AK, Coleman RL, **Wolf JK**, Gershenson DM. Selected highlights from the 5th International Conference on Ovarian Cancer. Houston, TX, USA, 1-4 December 2004. *Expert Opin Pharmacother* 2005 Jun; 6(7):1269-75.
60. Smith JA, Ngo H, Martin MC, **Wolf JK**. An evaluation of cytotoxicity of the taxane and platinum agents combination treatment in a panel of human ovarian carcinoma cell lines. *Gynecol Oncol* 2005 Jul;98(1):141-5.
61. Slomovitz, **Wolf JK**, Ramondetta LM, Burke TW, Lu KH. Advances in the management of advanced and recurrent uterine papillary serous carcinoma. *Int J Gynecol Cancer* (accepted in press), 2005.
62. Wolf Slomovitz BM. Novel biologic therapies for the treatment of endometrial cancer. *Int J Gynecol Cancer* (accepted in press), 2005.
63. Coleman RL, Broaddus RR, Bodurka DC, **Wolf JK**, Burke TW, Kavanagh JJ, Levenback CF, Gershenson DM. Phase II trial of imatinib mesylate in patients with recurrent platinum- and taxane-resistant epithelial ovarian and primary peritoneal cancers. *Gynecol Oncol* 2006 Apr;101(1):126-31, 4/2006. e-Pub 2005 Nov 3.

64. Frumovitz M, Coleman RL, Gayed IW, Ramirez PT, **Wolf JK**, Gershenson DM, Levenback CF. Usefulness of preoperative lymphoscintigraphy in patients who undergo radical hysterectomy and pelvic lymphadenectomy for cervical cancer. *Am J Obstet Gynecol* 2006 Apr;194(4):1186-93.
65. **Wolf JK**, Bodurka DC, Verschraegen C, Sun CC, Branham D, Jenkins AD, Atkinson N, Gershenson DM. A phase II trial of oral capecitabine in patients with platinum--and taxane--refractory ovarian, fallopian tube, or peritoneal cancer. *Gynecol Oncol* 2006 Sept; 102(3):468-74. e-Pub 2006 Mar3.
66. Smith JA, Gaikwad A, Ramondetta LM, **Wolf JK**, Brown J. Determination of the mechanism of gemcitabine modulation of cisplatin drug resistance in panel of human endometrial cancer cell lines. *Gynecol Oncol* 2006 Nov;103(2):518-22.
67. Maluf FC, Leiser AL, Aghajanian C, Sabbatini P, Pezzulli S, Chi DS, **Wolf JK**, Levenback C, Loh E, Spriggs DR. Phase II study of tirapazamine plus cisplatin in patients with advanced or recurrent cervical cancer. *Int J Gynecol Cancer* 2006 May-Jun;16(3):1165-71.
68. Saucier JM, Yu J, Gaikwad A, Coleman RL, **Wolf JK**, Smith JA. Determination of the optimal combination chemotherapy regimen for treatment of platinum-resistant ovarian cancer in nude mouse model. *J Oncol Pharm Pract* 2007 Mar;13(1):39-45.
69. Crotzer DR, Sun CC, Coleman RL, **Wolf JK**, Levenback CF, Gershenson DM. Lack of effective systemic therapy for recurrent clear cell carcinoma of the ovary. *Gynecol Oncol* 2007 May; 105(2):404-8. e-Pub 2007 Feb 9.
70. Soper JT, Spillman M, Sampson JH, Kirkpatrick JP, **Wolf JK**, Clarke-Pearson DL. High-risk gestational trophoblastic neoplasia with brain metastases: individualized multidisciplinary therapy in the management of four patients. *Gynecol Oncol* 2007 Mar;104(3):691-4, e-Pub 2006 Nov 29.
71. Tung CS, Soliman PT, Wallace MJ, **Wolf JK**, Bodurka DC. Successful catheter-directed venous thrombolysis in phlegmasia cerulea dolens. *Gynecol Oncol* 2007; 107(1):140-142.
72. Crotzer DR, **Wolf JK**, Gano JB, Gershenson DM, Levenback C. A pilot study of cisplatin, ifosfamide and mesna in the treatment of malignant mixed mesodermal tumors of the ovary. *Gynecol Oncol*. 2007 May; 105(2):399-403. Epub 2007 Feb 9.
73. Smith JA, Gaikwad A, Yu J, **Wolf JK**, Brown J, Ramondetta L, Stewart C. In vitro evaluation of the effects of gefitinib on the modulation of cytotoxic activity of selected anticancer agents in a panel of human ovarian cancer cell lines. *Cancer Chemother Pharmacol* 62(1):51-58, 2008. e-Pub 9/2007
74. Ramirez PT, Schmeler KM, **Wolf JK**, Brown J, Soliman PT. Robotic radical parametrectomy and pelvic lymphadenectomy in patients with invasive cervical cancer. *Gynecol Oncol* 111(1):18-21, 10/2008. e-Pub 2008 Jul 18.
75. Hunter RJ, Navo MA, Thaker PH, Bodurka DC, **Wolf JK**, Smith JA. Dosing chemotherapy in obese patients: actual versus assigned body surface area (BSA). *Cancer Treat Rev* 2009 Feb 35(1):69-78. e-Pub 2008 Oct 14.
76. Gaikwad A, **Wolf JK**, Brown J, Ramondetta LM, Smith JA. In vitro evaluation of the effects of gefitinib on the cytotoxic activity of selected anticancer agents in a panel of human endometrial cancer cell lines. *J Oncol Pharm Pract* 2009 Mar; 15(1):35-44, e-Pub 2008 Aug 27.
77. Schmeler KM, Vadhan-Raj S, Ramirez PT, Apte SM, Cohen L, Bassett RL, Iyer RB, **Wolf JK**, Levenback CL, Gershenson DM, Freedman RS. A phase II study of GM-CSF and rIFN-gamma1b plus carboplatin for the treatment of recurrent, platinum-sensitive ovarian, fallopian tube and primary peritoneal cancer. *Gynecol Oncol* 2009 May;113(2):210-5. e-Pub 2009 Mar 4.
78. Tung CS, Mok SC, Tsang YT, Zu Z, Song H, Liu J, Deavers MT, Malpica A, **Wolf JK**, Lu KH, Gershenson DM, Wong KK. PAX2 expression in low malignant potential ovarian tumors and low-grade ovarian serous carcinomas. *Mod Pathol*. 2009 Sep; 22(9):1243-50, e-Pub 2009 Jun 12.
79. Mangala LS, Zuzel V, Schmandt R, Leshane ES, Halder JB, Armaiz-Pena GN, Spannuth WA, Tanaka T, Shahzad MM, Lin YG, Nick AM, Danes CG, Lee JW, Jennings NB, Vivas-Mejia PE, **Wolf JK**, Coleman RL, Siddik ZH, Lopez-Berestein G, Lutsenko S, Sood AK. Therapeutic targeting of ATP7B in Ovarian Carcinoma. *Clin Cancer Res* 2009 Jun 1;15(11):3770-80, e-Pub 2009 May 26.
80. Xie X, Hsu JL, Choi MG, Xia W, Yamaguchi H, Chen CT, Trinh BQ, Lu Z, Ueno NT, **Wolf JK**, Bast RC, Hung MC. A novel hTERT promoter-driven E1A therapeutic for ovarian cancer. *Mol Cancer Ther*. 2009 Sept;8(8):2771
81. Kavanagh JJ, Levenback CF, Ramirez PT, **Wolf JK**, Moore CL, Jones MR, Meng L, Brown GL, Bast Jr. RC. Phase 2 study of canfosfamide in combination with pegylated liposomal doxorubicin in platinum and paclitaxel refractory or resistant epithelial ovarian cancer. *Journal of Hematology & Oncology* 2010 Mar 11;3:9.
82. Slomovitz BM, Lu KH, Johnston T, Coleman RL, Munsell M, Broaddus RR, Walker C, Ramondetta LM, Burke TW, Gershenson DM, **Wolf J**. A phase 2 study of the oral mammalian target of rapamycin inhibitor, everolimus, in patients with recurrent endometrial carcinoma. *Cancer*. 2010 Dec 1; 116(23):5415-9.e-Pub 2010 Aug 2.
83. Brown J, Smith JA, Ramondetta LM, Sood AK, Ramirez PT, Coleman RL, Levenback CF, Munsell MF, Jung M, **Wolf JK**. Combination of gemcitabine and cisplatin is highly active in women with endometrial carcinoma: results of a prospective phase 2 trial. *Cancer* 2010 Nov 1;116(21):4973-9. e-Pub 7/2010.
84. Fu S, Hu W, Iyer R, Kavanagh JJ, Coleman RL, Levenback CF, Sood AK, **Wolf JK**, Gershenson DM, Markman M, Hennessy BT, Kurzrock R, Bast RC. Phase 1b-2a study to reverse platinum resistance through use of a hypomethylating agent, azacitidine, in patients with platinum-resistant or platinum-refractory epithelial ovarian cancer. *Cancer*. 2011 Apr 15:117(8) e-Pub 2010 Nov 8.
85. Wong KK, Tsang YTM, Deavers MT, Mok SC, Zu Z, Sun CC, Malpica A, **Wolf JK**, Lu KH, Gershenson DM. BRAF Mutation is rare in advanced stage low-grade ovarian serous carcinomas. *The American Journal of Pathology*. 2010 Oct 177(4): 1611-17, e-Pub 2010 Aug 27.
86. Tung CS, Mok S, Deavers M, Liu J, Malpica A, Lu KH, Tsang-Lee YT, Zu Z, **Wolf JK**, Gershenson DM, Song H. Pax2 expression in low malignant potential ovarian tumors and low-grade ovarian serous carcinomas. *Modern Pathology*. 2009 Sep;22(9):1243-50. e-Pub 2009 June 19.
87. Tanyi JL, Smith JA, Ramos LM, Parker C, Munsell M, **Wolf JK**. Predisposing risk factors for Palmar-Plantar erythrodysesthesia when using liposomal doxorubicin to treat recurrent ovarian cancer. *Gynecologic Oncology* , 2009 Aug;114(2):219-24. e-Pub 2009 May 17.
88. Hunter RJ, Fujii H, Wakame K, Gaikwad A, **Wolf JK**, Smith JA. *In vitro* and *in vivo* evaluation of active hexose correlated compound (AHCC) in combination with pegylated liposomal doxorubicin for treatment of ovarian cancer. *The Journal of Applied Research in Natural Products*. Vol 4, No 3 2011
89. King ER, Tung CS, Tsang YT, Zu Z, Lok GT, Deaves MT, Malpica A, **Wolf JK**, Lu KH, Birrer MJ, Mok SC, Gershenson DM, Wong KK. The anterior gradient homolog 3 (AGR3) gene is associated with differentiation and survival in ovarian cancer. *American Journal of Surgical Pathology*, 2011 Jun, 35(6):904-12.
90. Rahma OE, Ashtar E, Czystowska M, Szajnik ME, Wieckowski E, Bernstein S, Herrin VE, Shams MA, Steinberg SM, Merino M, Gooding W, Visus C, Deleo AB, **Wolf JK**, Bell JG, Berzofsky JA, Whiteside TL, Khleif SN. A Gynecologic Oncology Group Phase II trial of two p53 peptide vaccine approaches: subcutaneous injection and intravenous pulsed dendritic cells in high recurrence risk ovarian cancer patients. *Cancer Immunol Immunother*. 2012 Mar;61(3):373-84.Epub 2011 Sep 17

91. Fu S, Hennessy BT, Ng CS, Ju Z, Coombes KR, **Wolf JK**, Sood AK, Levenback CF, Coleman RL, Kavanagh JJ, Gershenson DM, Markman M, Dice K, Howard A, Li J, Li Y, Stemke-Hale K, Dyer M, Atkinson E, Jackson E, Kundra V, Kurzrock R, Bast RC Jr, Mills GB. Perifosine plus docetaxel in patients with platinum and taxane resistant or refractory high-grade epithelial ovarian cancer. *Gynecol Oncol*. 2012 Jul;126(1):47-53.
92. Julius JM, Tanyi JL, Ramos L, Munsell MF, Watkins JL, Coleman RL, **Wolf JK**, Smith JA. Evaluation of pegylated liposomal doxorubicin dose on the adverse drug event profile and outcomes in treatment of recurrent endometrial cancer. *International Journal of Gynecologic Oncology*. 2013 Feb;23(2):348-54
93. Estrella JS, **Wolf JK**, Deavers MT. Ovarian serous carcinoma associated with a distinct "corded and hyalinized" pattern. *Archives of Pathology and Laboratory Medicine*. 2013 Feb;137(2):275-9.
94. Julius JM, Nogueras-Gonzalez GM, Watkins JL, Coleman RL, **Wolf JK**, Smith JA. Effect of declining renal function on the incidence of adverse drug events associated with liposomal doxorubicin in patients treated for gynecologic malignancies. *International Journal of Gynecologic Oncology*. 2013 Feb;23(2):48-54.
95. Robert L. Coleman, MD; Thomas J. Herzog, MD; Daniel W. Chan, PhD; Donald G. Munroe, PhD; Todd C. Pappas, PhD; Alan Smith, MS; Zhen Zhang, PhD; Judith Wolf, MD. Validation of a second-generation multivariate index assay for malignancy risk of adnexal masses. *Am J Obstet Gynecol* 2016A
96. The clinical utility of an elevated-risk multivariate index assay score in ovarian cancer patients. Eskander RN, [Carpenter BA](#), [Wu HG](#), [Wolf JK](#) *Curr Med Res Opin*. 2016
97. Noninvasive Blood-based Combinatorial Proteomic Biomarker Assay to Detect Breast Cancer in Women over age 50 with BI-RADS 3, 4, or 5 Assessment. Henderson MC, [Silver M1](#), [Tran Q1](#), [Letsios EE1](#), [Mulpuri R2](#), [Reese DE1](#), [Lourenco AP3](#), [LaBaer J4](#), [Anderson KS4](#), [Alpers J5](#), [Costantini C6](#), [Rohatgi N7](#), [Ali H8](#), [Baker K9](#), [Northfelt DW10](#), [Ghosh K11](#), [Grobmyer SR12](#), [Polen W13](#), [Wolf JK1](#). *Clin Cancer Res*. 2019
98. Breast density does not impact the ability of Videssa® Breast to detect breast cancer in women under age 50. [Reese DE1](#), [Henderson MC1](#), [Silver M1](#), [Mulpuri R1](#), [Letsios E1](#), [Tran Q1](#), [Wolf JK1](#). *PLoS One*. 2017.
99. Editors note: Therapeutic Targeting of ATP7B in Ovarian Carcinoma. Mandala LS, Zuzei V., Schmandt R, Leshane ES, Halder JB, Armaniz-Peña GN, Spannuth WA, Tanaka T, Shahzad MMK, Lin YG, Nick AM, Danes CG, Lee JW, Jennings NB, Vivas-Mejia PE, Wolf JK, Coleman RL, Siddik ZH, Lopez-Berenstein G, Lutsenko S, Sood AK. *Clin Cancer Res*. 2021 Aug 1;27 (15):4454. doi: 10.1158/1078-0432.CCR-21-2120. PMID: 34341059. No abstract available.

#### Invited Articles

1. **Wolf JK**, Wharton JT. Wild-type p53 overexpression: what role in tumorigenesis? *Gynecol Oncol* 60(3):337-8, 3/1996.
2. **Wolf JK**. Management of wound complications. *Clin Consults in Ob/Gyn* 8:79-84, 1996.
3. **Wolf JK**, Ramirez PT. The molecular biology of cervical cancer. *Cancer Invest* 19(6)(6):621-9, 2001.
4. **Wolf JK**, Jenkins AD. Gene therapy for ovarian cancer (review). *Int J Oncol* 21(3)(3):461-8, 9/2002.
5. **Wolf JK**, Coleman RL. Commentary on, Phase I trial of intraperitoneal injection of the E1B-55-kd-gene-deleted adenovirus ONYZ-015(d11520) given on days 1 through 5 every 3 weeks in patients with recurrent/refractory epithelial ovarian cancer. Vasey, et al. *J Clin Oncol* 2002;20:1562-9. "Women's Oncol Rev 2:325-7, 2002.
6. **Wolf JK**, Franco EL, Arbeit JM, Shroyer KR, Wu TC, Runowicz CD, Tortolero-Luna G, Herrero R, Crum CP. Innovations in understanding the biology of cervical cancer. *Cancer S* 98(9):2064-9, 2003.
7. **Wolf JK**, Franco EL, Arbeit JM, Shroyer KR, Wu TC, Runowicz CD, Tortolero-Luna G, Herrero R, Crum CP. Innovations in understanding the biology of cervical cancer. *Cancer S* 98(9)(9 Suppl):2064-9, 2003.
8. Markman, Gershenson DM, **Wolf JK**. Controversies in Ovarian Cancer. *ACOG Update* 30:1-9, 2004.
9. Soliman PT, Slomovitz BM, **Wolf JK**. Mechanisms of cervical cancer. *Drug Discov Today: Dis Mech* 1(2):253-258, 2004.
10. Slomovitz B, Soliman P, **Wolf JK**. New standards for treating recurrent ovarian cancer. *NOCC* 19(Summer):5, 2004.
11. **Wolf JK**, Slomovitz BM. Novel biologic therapies for the treatment of endometrial cancer. *Int J Gynecol Cancer* 15(2):411, 2005.
12. **Wolf JK**. Prevention and treatment of vaginal stenosis resulting from pelvic radiation therapy. *Community Oncol* 3(10):665-71, 2006.

#### Editorials

1. **Wolf JK**, Wharton JT. Wild-type p53 overexpression: what role in tumorigenesis? *Gynecol Oncol* 60(3):337-8, 1996.

#### Other Articles

1. **Wolf JK**. Gynecologic Cancer Treatment Update (Highlights from ASCO 2003). *Vital Signs Monograph*, Fall, 2003.
2. Herzog, Coleman R, McGuire, Monk B, Spriggs D, **Wolf JK**. Patterns of Practice in Selected Gynecologic Malignancies. Colloquium at the Annual Meeting on Women's Cancer 2005 36th Annual Meeting of the Society of Gynecologic Oncologist. (SGO Monograph), 2005.

#### Book Chapters

1. Hallum AV, III, Coleman RL, **Wolf JK**. Gynecologic Oncology. In: The M. D. Anderson Surgical Oncology Handbook. Ed(s) David H. Berger, Barry W. Feig, and George M. Fuhrman. Little Brown and Company: Boston, MA, 326-368, 1995.
2. Bevers MW, Bodurka Bevers DC, **Wolf JK**. Gynecologic Cancers. In: The M. D. Anderson Surgical Oncology Handbook, Second Edition. Ed(s) Barry W. Feig, David H. Berger, and George M. Fuhrman. Lippincott Williams & Wilkins: Philadelphia, 377-424, 1998.
3. **Wolf JK**, Mills GB, Bast RC, et al. P53-mediated Gene Therapy. In: Ovarian Cancer. Ed(s) Frank Shart, Tony Blackett, Jonathan Berek and Robert Bast. Isis Medical Media Ltd: Oxford England, 259-27, 1998.
4. **Wolf JK**, Burke TW. Vulva/Vaginal Cancer. In: Practical Strategies in Obstetrics and Gynecology. Ed(s) Mitchell P. Dombrowski, S. Gene McNeeley, Kamran S. Moghissi, and Adnan R. Munkarah. W. B. Saunders Company: Philadelphia, 449-457, 2000.
5. **Wolf JK**. Molecular Biology. In: ACS Atlas of Clinical Oncology: Cancer of the Female Lower Genital Tract. Ed(s) Eifel PJ, Levenback C. B. C. Decker, Inc: Hamilton London, 2001.
6. Bevers MW, Bodurka Bevers DC, **Wolf JK**. Gynecologic Cancers. In: The M. D. Anderson Surgical Oncology Handbook, Third Edition. Ed(s) Barry W. Feig, David H. Berger, and George M. Fuhrman. Lippincott Williams & Wilkins: Philadelphia, PA, 445-490, 2003.
7. Tanyi JL, Crotzer D, **Wolf JK**, Yu S, Hasegawa Y, Lahad J, Wa Cheng K, Umezue-Goto M, Prestwich GD, Morris A, Newman RA, Felix EA, Lapis GB, Mills GB. Lysophosphatidic Acid as a Targets for the Molecular Diagnosis and Therapy of Ovarian Cancer. A Review Article. In: Functional Lipidomics. Ed(s) Feng L, Prestwich GD. CRC Press Taylor & Francis Group: Boca Raton, FL, 101-123, 2005.

8. **Wolf JK**, Wharton JT. Surgery for Ovarian Cancer. In: Gynecologic Cancer. Ed(s) Gershenson DM, Eifel PJ, Kavanagh JJ, and Silva E. Springer-Verlag: New York, NY, 174-186, 2005.
9. Slomovitz BM, Soliman PT, **Wolf JK**. Gynecologic Cancers. In: The M. D. Anderson Surgical Oncology Handbook, Fourth Edition. Ed(s) Barry W. Feig, David H. Berger, and George M. Fuhrman. Lippencott Williams & Wilkins: Philadelphia, PA, 520-563, 2006.
10. Smith JA, **Wolf JK**. Ovarian Cancer. In: Pharmacotherapy: A Pathophysiologic Approach 8th Edition, 8th. Ed(s) DiPiro JT, Matzke GR, Yee GC, Talbert RL, Wells BG, Posey LM. McGraw-Hill Companies: Illinois. 2010.

**Letters to the Editor**

N/A

**Manuals, Teaching Aids, Other Teaching Publications**

N/A

**Other Publications**

N/A

**EDITORIAL AND REVIEW ACTIVITIES****Editor/Service on Editorial Board(s)**

N/A

**Member of Editorial Review Board**

Editorial Board Member, Clinical Ovarian Cancer: &amp; Other Gynecologic Malignancies, CIG Media, 2008–present

Editorial Board Reviewer, European Journal of Clinical and Medical Oncology, San Lucas Medical Limited c/o Barefoot Investment Ltd,

Editorial Board of the Peer Reviewed Journal, 2010–present

Editorial Board Reviewer, American Society of Clinical Oncology, 2013 ASCO Educational Book

Editorial Advisory Board Reviewer, ADC Review/Journal of Antibody-drug Conjugates, 2013

**Journal Reviewer**

Reviewer, Gynecologic Oncology, 1995–present

Adhoc Reviewer, Obstetrics and Gynecology, 1996–present

Adhoc Reviewer, Clinical Cancer Research, 1998–present

Adhoc Reviewer, International Journal of Gynecologic Cancer, 1998–present

Adhoc Reviewer, International Journal of Radium Oncology, 1998–present

Adhoc Reviewer, Journal of Clinical Oncology, 1999–present

Adhoc Reviewer, American Journal of Pathology, 2001–present

Adhoc Reviewer, American Journal of Obstetrics and Gynecology, 2005–present

**Other Editorial and Review Activities**

Editor, Help Break the Silence.Talk about Ovarian Cancer, National Ovarian Cancer Coalition - NOCC Editors Event; New York, NY, April 29, 2008

**TEACHING****Teaching Within Current Institution – Banner MD Anderson Cancer Center****Formal Teaching****Courses Taught**

N/A

**Training Programs**

N/A

**Other Formal Teaching**

Lecturer, 1995-1999, Gynecologic Oncology for Enterostomal Therapy Nurses / Role of Gynecologic Oncologist talk given twice a year 1995–1999

Lecturer, 1998, Advances in Research for Ovarian Cancer / Sprint for Life Symposium 1998

Lecturer, 1998, Ovarian Cancer Treatment: Molecular Approaches / Grand Rounds 1998

Lecturer, 1999, Advances and Innovations in Ovarian Cancer / Sprint for Life Symposium 1999

**Supervisory Teaching****Committees****Advisory Committees**

Thesis Advisory Committee, GSBS, Christine Lee, MD, 2001–2003

Thesis Advisory Committee, GSBS, David Crotzer, MD, 2002–2004

Thesis Advisory Committee, GSBS, Monique Nillson, 2003–2005

**Supervisory Committees**

Chair, Thesis Supervisory Committee, GSBS, David Crotzer, MD, 2002–2004

**Examining Committees**

N/A

**Direct Supervision****Undergraduate and Allied Health Students**

N/A

**Medical Students**

4+ Year Medical Students- Midwestern University, Phoenix, AZ

**Graduate Students**

GSBS, David Crotzer, MD, 2002–2004

**Postdoctoral Research Fellows**

Tae-Eu Kim Koreai, 1996–1997

Basic Science, Lois Ramondetta, MD, 1998

Basic Science, Pedro Ramirez, MD, 1998  
Basic Science, Susan Modesitt, MD, 1999  
Basic Science, Veronica Schimp, DO, 2000  
Basic Science, Janos Tanyi, 2001–2004  
Basic Science, Dwayne Jenkins, MD, 2001  
Basic Science, David Crotzer, MD, 2002–2004

**Clinical Residents and Fellows**

Diljeet Singh, 7/1996–6/1999  
Kenny Bozorgi, 7/1996–6/1999  
Terri Pustilnik, 7/1996–6/1999  
Lois M. Ramondetta, 7/1997–6/2000  
Lynn P. Parker, 7/1997–6/2000  
Mary E. Gordinier, 7/1997–6/2000  
Carlos Herrera, 7/1998–6/2001  
Lloyd West, 7/1998–6/2001  
Pedro T. Ramirez, 7/1998–6/2001  
Jubilee Brown Robinson, 7/1999–6/2002  
Matthew Anderson, 7/1999–6/2002  
Susan Modesitt, 7/1999–6/2002  
Hyun Shvartsman, 7/2000–6/2003  
Sean Tedjerati, 7/2000–6/2003  
Veronica Schimp, 7/2000–6/2003  
Alfred Dwayne Jenkins, 7/2001–6/2004  
Amir Jazaeri, 7/2001–6/2004  
Jonathan Oh, 7/2001–6/2004  
Christine Lee, 7/2001–6/2005  
Michael Frumovitz, 7/2001–6/2005  
Sachin Apte, 7/2001–6/2005  
Brian Slomovitz, 7/2002–6/2006  
David Crotzer, 7/2002–6/2006  
Premal Thaker, 7/2002–6/2006  
Salvador Saldivar, 7/2003–6/2006  
Charles Landen, 7/2003–6/2007  
Pamela Soliman, 7/2003–6/2007  
Aparna Kamat, 7/2004–6/2008  
Kathleen Schmeler, 7/2004–6/2008  
Liz Han, 7/2004–6/2008  
Michael Milam, 7/2005–6/2009  
William Merritt, 7/2005–6/2009  
Yvonne Lin, 7/2005–6/2009  
John Moroney, 7/2006–6/2010  
Robin Lacour, 7/2006–6/2010  
Shannon Westin, 7/2006–6/2010  
Whitney Spannuth, 7/2006–6/2010  
Alpa Nick, 7/2007–6/2011  
Celestine Tung, 7/2007–6/2011  
Larissa Meyer, 7/2007–6/2011  
Jennifer Kelly Burzawa, 7/2008–6/2012  
Matthew Peter Schlumbrecht, 7/2008–6/2012  
Rebecca Lynn Stone, 7/2008–6/2012

**Other Supervisory Teaching**

Julie Huh, 4th year medical student, Graduate Students, 1996  
Lisa Bazzett, Clinical Residents and Fellows, 1997

Mentor, Global Academic Programs - University Hospital Juan Canalejo, Spain, Ovidio Fernandez-Calvo, MD, Foreign Visitor, 2/2009–5/2009

Mentor, Sister Institution Associates - Fudan Cancer Hospital, China, Global Academic Programs, Jie Tang, MD, Foreign Visitor, 6/2009–12/2009

**Teaching Outside of Current Institution****Formal Teaching****Courses Taught**

Current Directions in Cancer Therapy & Research, National Ovarian Cancer Coalition

Yearly, 1998–present

A-Z Gene Therapy Replacing p53 to achieve antitumor effect, Society of Gynecologic Oncologists

Lecturer, Gene Therapy for Gynecologic Malignancies, University of Texas Medical School

**Supervisory Committees**

PhD Committee, Lee Seabrooke, Arizona State University, Tempe, AZ

**CONFERENCES AND SYMPOSIA****Organization of Conferences/Symposia (Include chairing session)**

N/A

**Presentations at National or International Conferences****Invited**

Characterization of two populations of the human ovarian cancer cell line, 2774, that express different levels of epidermal growth factor receptor, AACR Annual Meeting, 1993

Characterization of two populations of the human ovarian cancer cell line, 2774, that express different levels of epidermal growth factor receptor, Felix Rutledge Society Annual Meeting, 1993

Enhanced c-erbB-2/neu expression in human ovarian cancer cells correlates with more severe malignancy that can be suppressed by E1A, American Radium Society Annual Meeting, Aruba, 1993

Relationship between expression of c-erbB2/neu and the malignant phenotype of a human ovarian cancer cell line (SKOV3), Felix Rutledge Society Annual Meeting, 1993

Expression of adenovirus  $\beta$ -galactosidase in rhesus monkey cervix and growth inhibition of human cervical cancer cells by recombinant p53, Felix Rutledge Society Annual Meeting, 1995

Growth inhibition of human cervical cancer cells by the recombinant adenovirus-mediated transfer of a wild-type p53 gene, Society of Gynecologic Oncologists 26th Annual Meeting, San Francisco, CA, 1995

The significance of cone biopsy margins in patients with adenocarcinoma in situ of the cervix, Felix Rutledge Society Annual Meeting, 1995

A-Z Gene Therapy - Replacing p53 to achieve antitumor effect, Society of Gynecologic Oncologist, 1997

Growth inhibition of human ovarian cancer cells by combination treatment with cisplatin and transfection with adenovirus-mediated p53, Society of Gynecologic Oncologists 28th Annual Meeting, Phoenix, AZ, 1997

Replacing p53 to Achieve an Antitumor Effect, Society of Gynecologic Oncologist 28th Annual Meeting, Phoenix, AZ, 1997

Growth suppression of human ovarian cancer cell lines by the introduction of a P16 via a recombinant adenovirus, Society of Gynecologic Oncologists Annual Meeting, 1998

Cirugia Citorreductora VS Cirugia Minimay uimioterapia Adyuvante, Sociedad Venezolana De Oncologia, VIII Congreso Venezolano De Oncologia, Puerto La Cruz, Venezuela, 10/9/1998

Ganglio Centinela En El Manejo Del Cancer Vulva, Sociedad Venezolana De Oncologia, VIII Congreso Venezolano De Oncologia, Puerto La Cruz, Venezuela, 10/9/1998

Principios De Terapia Genetica Aplicados A Oncologia Media, Sociedad Venezolana De Oncologia, VIII Congreso Venezolano De Oncologia, Puerto La Cruz, Venezuela, 10/9/1998

Terapia Genetica En Cancer, Sociedad Venezolana De Oncologia, VIII Congreso Venezolano De Oncologia, Puerto La Cruz, Venezuela, 10/9/1998

Gene Therapy for Gynecologic Malignancies, Department of Gynecology Grand Rounds, University of Texas Medical School, Houston, TX, 9/28/1999

A phase I trial of ADP53 for ovarian cancer patients: Correlation with p53 and anti-adenovirus AB status, Society of Gynecologic Oncologist Annual Meeting, 2000

A Phase I Trial of Adp53 for Patients with Platinum- and Paclitaxel-Resistant Epithelial Ovarian Cancer, 31st Annual Meeting of the Society of Gynecologic Oncologists, San Diego, CA, 2/9/2000

Prognostic Factors in Endometrial Cancer, Society of Gynecologic Oncologists 2000 Winter Meeting, Park City, UT, 3/18/2000

Effect of Transfecting P16 & P53 Suppressors on Cell Growth and Apoptosis in Ovarian Cancer Cell Lines, American Association for Cancer Research, 91st Annual Meeting, San Francisco, CA, 4/1/2000

Womens Professional Development, Association of American Medical Colleges Professional Development Seminar for Junior Women Faculty, Association of American Medical Colleges, Reston, VA, 4/1/2000

A Phase I Trial of Adp53 (RPR/INGN 201) for Ovarian Cancer Patients: Correlation with P53 and Anti-Adenovirus Antibody Status, American Society of Clinical Oncology, New Orleans, LA, 5/22/2000

Gene Therapy in Patients with Epithelial Ovarian Cancer, Gynecologic Oncology Group, 7/2000

Application of Molecular Biology in Gynecologic Cancer, Annual Meeting of the Thai Gynecologic Oncology Group, Nakorn Nayok, Thailand, 8/12/2000

The Role of Liposomal Doxorubicin (Caelyx) in Ovarian Cancer, Annual Meeting of the Thai Gynecologic Oncology Group, Nakorn Nayok, Thailand, 8/12/2000

Gene Therapy for Cervical Cancer - An Update, 2nd Annual International Conference on Cervical Cancer, Houston, TX, 4/13/2002

In Vivo Adenovirus-Mediated p16 Tumor Suppressor Gene Therapy in Ovarian Cancer, Texas Forum on Female Reproduction 8th Annual Meeting, Houston, TX, 5/2/2002

A Phase II Study of Xeloda in Patients with Chemotherapy Resistant Recurrent Ovarian Cancer, ASCO 2002 Annual Meeting, Orlando, FL, 5/19/2002

The Role of Docetaxel in Gynecologic Malignancies, 40th Japanese Society of Clinical Oncology Annual Meeting, Juntendo University, Tokyo, Japan, 10/16/2002

Management of Ovarian cancer in the 21st Century-Surgery, Chemotherapy, and Molecular Therapy, 40th Japanese Society of Clinical Oncology Annual Meeting, Jutendo University, Tokyo, Japan, 10/17/2002

Surgical Management of Gynecologic Malignancies, 40th Japanese Society of Clinical Oncology Annual Meeting, Jutendo University, Tokyo, Japan, 10/17/2002

A Phase I/II Study to Evaluate the Optimum Biologic Dose of PEG-Intron in Patients with Platinum-Resistant Ovarian, Peritoneal, or Fallopian Tube Cancer, 11th SPORE Investigators Workshop, Baltimore, WA, 7/8/2003

A Phase I/II Study to Evaluate the Optimum Biologic Dose of PEG-Intron in Patients with Platinum-Resistant Ovarian, Peritoneal, or Fallopian Tube Cancer, 11th SPORE Investigator's Workshop, Baltimore, MD, 7/9/2003

P53 Targeted Therapy, 4th International Ovarian Cancer Conference, MSKCC, New York, NY, 9/11/2003

mTOR inhibition is a rational target for the treatment of endometrial cancer, ASCO 40th Annual Meeting, New Orleans, LA, 6/5/2004

Cervical and Endometrial Cancers - Preferred Treatment and Management Options, CME Conference, Hoag Cancer Center, Huntington Beach, CA, 1/28/2005

Health issues and risk factors for Breast and Gynecologic Cancers, Hadassah Check it Out program, San Antonio, TX, 2/9/2005

Cervical Cancer, Ovarian Cancer: What We Need to Know, Women's Health On Alert, Wellesley College, Wellesley, MA, 4/2/2005

Wiley, Miryam (Townsmen Correspondent) Women and hormonal health the expert views., The Wellesley Townsman: townonline.com, Wellesley College, Wellesley, MA, 4/7/2005

Transitioning from Fellow to Faculty: How to go About Setting up an Independent Laboratory, and How to be a Mentor for Students, Residents and Fellows, 2005 Southern Regional Professional Development Conference - Successful Strategies for Women in Academic Medicine, Little Rock, AR, 4/16/2005

The Role of COUP-TFII in Ovarian Cancer, Grand Rounds, Baylor College of Medicine, Houston, TX, 5/6/2005

Biologic Therapies Should be Used as Single Agents in Ovarian Cancer Clinical Trials, Felix Rutledge Society 36th Annual Meeting, Mackinac Island, MI, 7/15/2005

Surgical Treatment of Ovarian Cancer Indications and Advances in the 21st Century, Chinese Society of Gynecologic Oncology, Tsinghua University, Nanjing, China, 6/3/2006

Surgical Treatment of Ovarian Cancer Indications and Advances in the 21st Century and Beyond, International Forum on the Mechanisms and Management of Ovarian Cancer, Peking University People's Hospital, Beijing, China, 6/9/2006  
Thymidine Kinase Inhibitors in Gynecologic Malignancies, Felix Rutledge Society 36th Annual Meeting, Berlin, Germany, 9/7/2006  
Intraperitoneal Chemotherapy for Optimally Debulked Ovarian Cancer and Emerging Therapies in Ovarian Cancer, 6th Samsung Medical Center - M. D. Anderson Cancer Center International Symposium, Seoul, Korea, Republic of, 11/4/2006  
Ovarian Carcinoma for the General Oncologist, Third Symposium, Pursuit of Excellence: Addressing Issues and Trend in Oncology Nursing, UT M D Andersons Physicians Network, Santa Barbara, CA, 7/13/2007  
Early Detection and Treatment of Ovarian Cancer, SGO, Tampa, FL, 3/9/2008  
Optimizing Treatment Choices in Ovarian Cancer, SGO, Tampa, FL, 3/9/2008  
Advances in the Management of Ovarian Stromal Tumors, ASCO, Chicago, IL, 5/31/2008  
Ovarian Cancer, Uterine Cancer, Cervical Cancer, Hospital Israelita Albert Einstein and M D Anderson Cancer Center, Hospital Israelita Albert Einstein and M D Anderson Cancer Center, Sao Paulo, Brazil, 6/17/2008  
Minimally Invasive Surgery in Gynecology Oncology, II International Symposium of Gynecology Oncology - Hospital Sirio-Libanes, Sao Palo, Brazil, 11/7/2008  
Gene Therapy and Targeted Therapies in Gynecologic malignancies, II International Symposium of Gynecology Oncology - Hospital Sirio-Libanes, Sao Palo, Brazil, 11/8/2008  
Gynecologic Cancers.What you need to know about Ovarian, Uterine, and Cervix Cancers, Albert Einstein Instituto Israelita De Ensino E Pesquisa, Sao Paulo, Brazil, 6/23/2009  
Course Director, 8th International Conference on Ovarian Cancer, Memorial Sloan-Kettering Cancer Center, New York, NY, 9/24/2009  
Treatment of Ovarian Cancer 21st Century and Beyond, 6th Chinese Conference on Oncology and the 9th Cross-Strait Conference on Oncology, Fudan University Shanghai Cancer Center, Shanghai, China, 5/21/2010  
Chemotherapy Session Moderator, The 9<sup>th</sup> International Conference on Ovarian Cancer, Houston, TX 12/2/2011

### Scientific Exhibitions

Current Directions in Cancer Therapy & Research, Cancer in Women: A Comprehensive Scientific Symposium on the Gynecologic Malignancies, National Ovarian Cancer Coalition, San Diego, CA, 2/4/2000  
The Role of Gemcitabine in Ovarian Cancer, Lilly Oncology Advisory Meeting, Indianapolis, IN, 2/28/2002  
Current and New Treatment Strategies for Ovarian Cancer, Grand Rounds, University of Medicine & Dentistry of New Jersey, Newark, NJ, 3/27/2002  
Challenging Cases in Gynecologic Oncology, Network for Oncology Communication & Research, Las Vegas, NV, 8/17/2002  
Cancer in Women: A scientific update in prevention, screening, treatment and risk management for ovarian and cervical malignancies, National Ovarian Cancer Coalition, Inc., Boston, MA, 10/10/2002  
Ethical Delima's in Clinical Trials, John J. Molitar Lectureship CME Conference, University of California, Irvine, CA, 10/30/2002  
The Application of Gene Therapy for Gynecologic Malignancies, Texas Medical Center Gene Therapy Symposium, Houston, TX, 11/11/2002  
Indication for and Value of Screening for Ovarian Cancer, CME Conference, Inova Institute of Research & Education, Fairfax, VA, 11/15/2002  
Treatment of recurrent Ovarian Cancer, Grand Rounds, Walter Reed Army Medical Center, Bethesda, MD, 12/4/2002  
Current Treatment Strategies for Gynecologic Cancers, SGO Symposium 34th Annual Meeting, New Orleans, LA, 2/2/2003  
Panel Physician - Ovarian Cancer Panel, The National Comprehensive Cancer Network on Ovarian Cancer Panel, Chicago, IL, 2/7/2003  
Novel Therapeutics for Endometrial Cancer, 2003 SGO Winter Meeting, Breckenridge, CO, 3/7/2003  
Novel Approaches to the Treatment of Gynecological Cancer, 2003 Oncology Forum, Fox Chase Cancer Center, Philadelphia, PA, 4/26/2003  
Satellite Broadcast, Highlights from ASCO 2003, American Academy of the CME, Inc., Newark, NJ, 6/18/2003  
What's New in Ovarian Cancer Treatment, NOCC National Conference, Ft. Lauderdale, FL, 11/8/2003  
Ovarian Cancer: A Progress Report, 4th Annual Primary Care and Prevention conference, Atlanta, GA, 10/25/2004  
Current & New Treatments for Ovarian Cancer, NOCC Conference, Philadelphia, PA, 10/30/2004  
Clinical Trials, NOCC National Meeting, Ft. Lauderdale, FL, 11/13/2004  
Cancer In Women: a Scientific Update on Ovarian Cancer-Prevention, Screening and Treatment, CME Conference, CME Massachusetts Medical Society & NOCC, 2/4/2005  
Phase II Trials among the Ovarian SPOR Programs, Ovarian State of the Science Meeting - GOG Retreat, Bethesda, MD, 9/15/2005  
Challenging Cases in Women's Health Recurrent Ovarian Cancer at 8 Months, NMCR Challenging Cases in Gyn Oncology and Breast Cancer, Miami, FL, 6/17/2006  
How to Survive and Thrive as a Female Physician in Gynecologic Oncology, Japanese Society of Gynecologic Oncology 42nd Annual Meeting, Toyko, Japan, 6/28/2007  
What's New Gynecologic Oncology? An Update on Translational and Clinical Research, Japanese Society of Gynecologic Oncology 42nd Annual Meeting, Toyko, Japan, 7/2/2007  
Ovarian Carcinoma for the General Oncologist, UT M D Anderson Cancer Center and M D Anderson Physicians Network 3rd Annual Symposium

The University of Texas MD Anderson Cancer Center, Santa Barbara, CA, 7/9/2007 Ovarian Expert Recap - Clinical Options, ASCO, Chicago, IL, 5/30/2008 Controversial Issues in Recurrent Ovarian Cancer, Felix Rutledge Society Meeting, Buenos Aires, Argentina, 4/29/2009

Conversations with Oncology Investigators, Bridging the Gap between Research and Patient Care, Research to Practice CME Program, 01/2013

#### **National Seminar Invitations**

Attended, Association of American Medical Colleges Professional Development Seminar for Junior Women Faculty. Reston, Virginia, April 1-4, 2000

Gynecologic Cancers 2003 Treatment Update, CHRISTUS Spohn Shoreline Tumor Conference-CME, CHRISTUS Spohn Shoreline, Corpus Christi, TX, 8/27/2003

Update in the Management of Ovarian Cancer, Symposium on Women's Cancer, The Cleo Craig Memorial Cancer and Research Clinic, Lawton, OK, 8/28/2004

Palliative Care Issues for Patients Facing Advanced Ovarian Cancer, MDACC Physicians Network, Christus Schumpert Cancer CME Symposium, MDACC Physicians Network, Christus Schumpert Cancer CME Symposium, Shreveport, LA, 10/22/2004

PV, The Abnormal Pap Smear, and Cervical Cancer, MDACC Physicians Network, Christus Schumpert Cancer CME Symposium, MDACC Physicians Network, Christus Schumpert Cancer CME Symposium, Shreveport, LA, 10/22/2004

Metastatic Cervical Cancer, Cancer 2005: Preferred Treatment and Management Options, Hoag Cancer Center CME Oncology Meeting, Huntington Beach, CA, 1/28/2005

Recurrent Endometrial Cancer, Cancer 2005: Preferred Treatment and Management Options, Hoag Cancer Center CME Oncology Meeting, Huntington Beach, CA, 1/28/2005

Clinical Trials - Understanding, Navigating & Accessing Clinical Trials, Georgia Ovarian Cancer Awareness Conference, Georgia Ovarian Cancer Awareness Conference, Atlanta, GA, 2/19/2005

Cervical Cancer, Ovarian Cancer: What We Need to Know, Women's Health on Alert, Wellesley College, Wellesley, MA, 4/2/2005

Recurrent Endometrial Cancer Case#5, Challenging Cases in Women's Health, NOCR, Las Vegas, NV, 8/6/2005

Breaking Sound Barriers: Cutting Edge Research from the Lab and Clinical Trials, Turn the Volume Up-Ovarian Cancer National Alliance Conference, NOCC, Atlanta, GA, 9/29/2005

Clinical Trials 101, Turn the Volume Up-Ovarian Cancer National Alliance Conference, NOCC, Atlanta, GA, 9/29/2005

Risk Factors and Genetic Risk factors Regarding Ovarian Cancer, Diagnosis and Treatment of Ovarian Cancer - Beyond Chemotherapy National Ovarian Cancer Coalition Symposium, NOCC, Philadelphia, PA, 10/29/2005

Clinical Trials, National Ovarian Cancer Coalition Mini-Conferences, NOCC, Silver Springs, MD, 11/12/2005

Current & New Treatments for Ovarian Cancer, Grand Rounds, Advocate Christ Medical Center, Oak Lawn, IL, 1/12/2006

Progress and Treatment for Ovarian Cancer, Grand Rounds CME, MacNeal Hospital, Berwyn, IL, 4/25/2006

Women and Cancer: A Focus on Cervical and Ovarian Cancer, Oncology Nursing and Pharmacy Conference Series 2006: Collaboration for Advancing the Quality of Community Cancer Care, UTMB Office of Continuing Education, San Diego, CA, 11/18/2006

Women and Cancer: A Focus on Cervical and Ovarian Cancer, Oncology Nursing and Pharmacy Conference Series 2006: Collaboration for Advancing the Quality of Community Cancer Care, UTMB Office of Continuing Education, Williamsburg, VA, 12/2/2006

Future Directions and New Frontiers in Individualized Therapeutic Approaches, SGO-CME Certified Satellite Symposium Management of Recurrent Epithelial Ovarian Cancer: Current Standards and Novel Approaches, Society of Gynecologic Oncologist, San Diego, CA, 3/5/2007

Treatment of a Patient with Recurrent, Platinum-Resistant Disease, SGO-CME Certified Satellite Symposium Management of Recurrent Epithelial Ovarian Cancer: Current Standards and Novel Approaches, Society of Gynecologic Oncologist, San Diego, CA, 3/5/2007

Northwestern Prentice Women's Hospital, Guest Speaker, Chicago, IL. 02/08/2008 "From Bench to Bedside - My Personal Experience Texas Medical Association, Ovarian Cancer Advisory Panel Meeting, Austin, TX, July 21, 2008

EIF Callaway Golf Foundation Women's Cancer Initiative Annual Meeting, "Ovarian Cancer Research Program", Carlsbad, CA, August 8, 2008

The Impact of Stress, Gynecologic Cancer Foundation, NYU Langone Medical Center, New York, NY, 11/1/2008

Global Academic Programs (formerly Sister Institution Conference MDACC), Chair the Working Group on Gynecologic Malignancies, Houston, TX, 6/6/2008

M D Anderson Cancer Center Development Symposium, accompanied Dr. Mendelsohn and spoke at the Southern Hills Country Club, Tulsa, OK, June 24, 2008

Gastrointestinal Cancer Retreat and PI3K Workshop: CCSG Programs Onstead Auditorium, BSRB Mitchell Building

Advisor, Entereg Complex Gynecologic Surgery Advisory Meeting, GSK, Philadelphia, PA, December 5-6, 2008

Texas Medical Association, Ovarian Cancer Advisory Panel Meeting, Austin, TX, January 9, 2009

Advisor, Yondelis Advisory Board Meeting, Centocor Ortho Biotech, Newport Beach, CA, February 20-21, 2009

Texas Medical Association, Ovarian Cancer Advisory Panel Meeting, Austin, TX, July 14, 2009

Career Pathways for Women in Science and Medicine & What the Careers of the Future Will Hold and More, Dinner with the Experts, Spring Branch Independent School District, Houston, TX, January 21, 2010

Faculty, CE-Continuing Education Program, OncoBeat ASCO 2010: Reporting the News. Beating Cancer. Educational Concepts Group, LLC; Chicago, IL; June 7, 2010.

Advanced Ovarian Cancer, Facilitator for Interactive Case Discussions, SGO, March 26, 2012

Guest Speaker, "The Ethics of Clinical Trials", Phoenix Chapter of Association of Clinical Research Professionals, July 2013

#### **Lectureships/Visiting Professorships**

Gynecologic Oncology Overview, Grand Rounds, Beaumont Hospital, Beaumont, TX, 4/17/1997

Abnormal Uterine Bleeding & Endometrial Cancer, Grand Rounds, St. Frances Cabrini Hospital, Alexandria, LA, 8/24/1999

Gynecologic Oncology Overview, Grand Rounds, Nacogdoches/San Augustine Medical Society, Nacogdoches, TX, 11/10/1999

Gene Therapy for Gynecologic Malignancies, University of Minnesota Fellowship Program, Minneapolis, MN, 12/14/1999

Gynecologic Cancers: Diagnosis, Treatment & Outcomes-Where We've Been & Where We're Going, Grand Rounds, Christus Spohn Health System Tumor Conference, Corpus Christi, TX, 9/20/2000

Current and New Treatment Strategies for Ovarian Cancer, CME, University of Medicine & Dentistry of New Jersey, Medical School, Newark, NJ, 3/27/2002

Ethical Dilemmas in Clinical Trials, John J. Molitor Lectureship, University of California, Irvine, CA, 10/30/2002

The Application of Gene Therapy for Gynecologic Malignancies, Texas Medical Center Gene Therapy Symposium, Texas Medical Center, Houston, TX, 11/11/2002

Indication for and Value of Screening for Ovarian Cancer, CME, Inova Institute of Research & Education, Fairfax, VA, 11/15/2002

Treatment of recurrent Ovarian Cancer, CME, Walter Reed Army Medical Center, Bethesda, MD, 12/4/2002

Novel Therapeutics for Endometrial Cancer, 2003 SGO Winter Meeting, Society of Gynecologic Oncologists, Breckenridge, CO, 3/7/2003

Physician Advisor for Gynecological Cancer Advisory Board, Novel Approaches to the Treatment of Gynecological Cancer, 2003 Oncology Forum, Fox Chase Cancer Center, Philadelphia, PA, 4/26/2003

Translational Research from Bench to Bedside One Gynecologic Oncologist's Experience, Bench to Bedside Symposium, NYU Medical Center, New York, NY, 5/20/2005

Progress and Treatment of Ovarian Cancer, MDACC Faculty Speakers Bureau, CME - OB/GYN Grand Rounds, St. David's Healthcare, Austin, TX, 10/18/2005

Progress and Treatment of Ovarian Cancer, MDACC Faculty Speakers Bureau, CME - University Hospital Grand Rounds, University Health Care System, Augusta, GA, 10/20/2005

Current and New Treatments for Ovarian Cancer, CME, Advocate Christ Hospital, Oak Lawn, IL, 1/12/2006

The Ethics of Clinical Trials, University of Minnesota Gynecologic Oncology Consensus Conference, University of Minnesota, Minneapolis, MN, 5/8/2006

Comprehensive Management of Ovarian Cancer: Current Treatment and Maximizing Quality of Life, CME-Medical Communications Media, Novato Community Hospital, Novato, CA, 5/7/2007

Comprehensive Management of Ovarian Cancer: Current Treatment and Maximizing Quality of Life, Grand Rounds-Medical Communications Media, University of Pittsburgh, Pittsburgh, PA, 6/5/2007

Treatment of Ovarian Cancer - 21st Century and Beyond, Grand Rounds, UC Davis Medical Center, Gynecologic Oncology, Sacramento, CA, 12/17/2008

Gynecologic Cancers: Uterine Cancer, CME: Update on Endometrial Cancer, Citizens Medical Center, Office of Continuing Medical Education, Victoria, TX, 1/11/2010

#### **NATIONAL CONFERENCES- INVITED/ AND OR SPEAKER**

Treatment of Ovarian Cancer, National Ovarian Cancer Coalition State Chapters Meeting, NOCC, Ft. Lauderdale, FL, 11/5/1999

Commencement speaker, East Liverpool High School, East Liverpool, OH, 6/1/2000

Gynecologic Cancers: Diagnosis, Treatment & Outcomes-Where We've Been & Where We're Going, 2nd Annual "Closing Gaps & Opening Doors Conference for Working Women, U.S. Department of Labor, Women's Bureau Region VI, Austin, TX, 10/5/2000

Talk-back Session - Moderator, Wet State Theater, Alley Theater, UT M D Anderson Cancer Center & the Stanford Foundation, Austin, TX, 5/31/2001

Interferon-gamma in the Management of Ovarian Cancer clinical Advisory Program, Advisory Program, InterMune Pharmaceuticals, Houston, TX, 6/21/2001

Current & New Treatments for Ovarian Cancer, Cancer in Women: A Scientific Update in Prevention, Screening and Treatment for Ovarian Cancer, NOCC, Houston, TX, 1/1/2004

Management of Gynecologic Cancer, Sanofi-Synthelabo Oncology Health Science Advisory Board Meeting, Sanofi-Synthelabo Oncology, Dallas, TX, 4/24/2004

Controversies in Ovarian Cancer, ACOG Update, Audiotaped Tele-Conference, ACOG, Houston, TX, 5/14/2004

Health issues and risk factors for Breast and Gynecologic Cancers, Hadassah Check it Out program to educate young women in Houston Independent School District, Worthing High School, Houston, TX, 2/9/2005

Screening for Gynecologic Cancers, CME Memorial Hermann Southwest Hospital, Memorial Hermann Southwest Hospital, Houston, TX, 3/8/2005

The Role of COUP-TFII in Ovarian Cancer, Arthur M. Faris, Sr., MD Resident Research Day, Baylor College of Medicine, Obstetrics and Gynecology, Houston, TX, 5/6/2005

Menopause The Musical Out Loud - Breaking the Silence on Ovarian Cancer, National Ovarian Cancer Coalition, Matrix Graphix, and Ovarian Cancer National Alliance Aging Out Loud Tour, TOC Productions Inc., www.menopausethemusical.com, National Ovarian Cancer Coalition, Stafford, TX, 3/3/2006

Progress and Treatment of Ovarian Cancer, National Ovarian Cancer Coalition, American Cancer Society, National Ovarian Cancer Coalition, American Cancer Society, Austin, TX, 3/20/2006

What you need to know - Hereditary Breast and Ovarian Cancer, UT M D Anderson Cancer Center and The San Antonio Chapter of Hadassah, San Antonio, TX, 10/26/2006

Progress and Treatment for Ovarian Cancer, UTMB - CME Grand Rounds, Galveston, TX, 2/14/2007

Moderator - Stump the Professor, 37th Annual Meeting of the Felix Rutledge Society, Houston, TX, 6/13/2007

Ovarian Cancer Advisory Panel, Physician Oncology Education Program, Ovarian Cancer Advisory Panel Meeting, Texas Medical Association, Austin, TX, 12/10/2007

Cervical Cancer Update Including the Role of Vaccines, SGO-Society of Gynecologic Oncologist, Educational Concepts Group, LLC, Oncobeat SGO: Reporting the News.Beating Cancer, San Antonio, TX, 2/8/2009

Wolf, JK. Strategies for the Management of Platinum-Resistant Ovarian Cancer, 41st Annual Meeting on Women's Cancer Society of Gynecologic Oncologist, CBCE - University of North Texas Health Science Center at Fort Worth, Center for Biomedical Continuing Education, San Francisco, CA, 3/15/2010

Ovarian Cancer, Women's Cancer Awareness Conference, Methodist Healthcare System, San Antonio, TX, 9/30/2010

Gynecologic Oncology Overview, Grand Rounds, Beaumont Hospital, Beaumont, TX, 4/17/1997 Abnormal Uterine Bleeding & Endometrial Cancer, Grand Rounds, St. Frances Cabrini Hospital, Alexandria, LA, 8/24/1999

Gynecologic Oncology Overview, Grand Rounds, Nacogdoches/San Augustine Medical Society, Nacogdoches, TX, 11/10/1999

Gene Therapy for Gynecologic Malignancies, University of Minnesota Fellowship Program, Minneapolis, MN, 12/14/1999

Gynecologic Cancers: Diagnosis, Treatment & Outcomes-Where We've Been & Where We're Going, 2nd Annual "Closing Gaps & Opening Doors Conference for Working Women, U.S. Department of Labor, Women's Bureau Region VI, Austin, TX, 10/5/2000

Gynecologic Cancers: Diagnosis, Treatment & Outcomes-Where We've Been & Where We're Going, Grand Rounds, Christus Spohn Health System Tumor Conference, Corpus Christi, TX, 9/20/2000

Talk-back Session - Moderator, Wet State Theater, Alley Theater, UT M D Anderson Cancer Center & the Stanford Foundation, Austin, TX, 5/31/2001

Interferon-g in the Management of Ovarian Cancer clinical Advisory Program, Advisory Program, InterMune Pharmaceuticals, Houston, TX, 6/21/2001

Current and New Treatment Strategies for Ovarian Cancer, CME, University of Medicine & Dentistry of New Jersey, Medical School, Newark, NJ, 3/27/2002

Ethical Delima's in Clinical Trials, John J. Molitar Lectureship, University of California, Irvine, CA, 10/30/2002

The Application of Gene Therapy for Gynecologic Malignancies, Texas Medical Center Gene Therapy Symposium, Texas Medical Center, Houston, TX, 11/11/2002

Indication for and Value of Screening for Ovarian Cancer, CME, Inova Institute of Research & Education, Fairfax, VA, 11/15/2002

Treatment of recurrent Ovarian Cancer, CME, Walter Reed Army Medical Center, Bethesda, MD, 12/4/2002

Novel Therapeutics for Endometrial Cancer, 2003 SGO Winter Meeting, Society of Gynecologic Oncologist, Breckenridge, CO, 3/7/2003

Physician Advisor for Gynecological Cancer Advisory Board, Novel Approaches to the Treatment of Gynecological Cancer, 2003 Oncology Forum, Fox Chase Cancer Center, Philadelphia, PA, 4/26/2003

Current & New Treatments for Ovarian Cancer, Cancer in Women: A Scientific Update in Prevention, Screening and Treatment for Ovarian Cancer, NOCC, Houston, TX, 1/1/2004

Management of Gynecologic Cancer, Sanofi-Synthelabo Oncology Health Science Advisory Board Meeting, Sanofi-Synthelabo Oncology, Dallas, TX, 4/24/2004

Controversies in Ovarian Cancer, ACOG Update, Audiotaped Tele-Conference, ACOG, Houston, TX, 5/14/2004

Health issues and risk factors for Breast and Gynecologic Cancers, Hadassah Check it Out program to educate young women in Houston Independent School District, Worthing High School, Houston, TX, 2/9/2005

Screening for Gynecologic Cancers, CME Memorial Hermann Southwest Hospital, Memorial Hermann Southwest Hospital, Houston, TX, 3/8/2005

The Role of COUP-TFII in Ovarian Cancer, Arthur M. Faris, Sr., MD Resident Research Day, Baylor College of Medicine, Obstetrics and Gynecology, Houston, TX, 5/6/2005

Translational Research from Bench to Bedside One Gynecologic Oncologist's Experience, Bench to Beside Symposium, NYU Medical Center, New York, NY, 5/20/2005

Progress and Treatment of Ovarian Cancer, MDACC Faculty Speakers Bureau, CME - OB/GYN Grand Rounds, St. David's Healthcare, Austin, TX, 10/18/2005

Progress and Treatment of Ovarian Cancer, MDACC Faculty Speakers Bureau, CME - University Hospital Grand Rounds, University Health Care System, Augusta, GA, 10/20/2005

Current and New Treatments for Ovarian Cancer, CME, Advocate Christ Hospital, Oak Lawn, IL, 1/12/2006

Menopause The Musical Out Loud - Breaking the Silence on Ovarian Cancer, National Ovarian Cancer Coalition, Matrix Graphix, and Ovarian Cancer National Alliance Aging Out Loud Tour, TOC Productions Inc., www.menopausethemusical.com, National Ovarian Cancer Coalition, Stafford, TX, 3/3/2006

Progress and Treatment of Ovarian Cancer, National Ovarian Cancer Coalition, American Cancer Society, National Ovarian Cancer Coalition, American Cancer Society, Austin, TX, 3/20/2006

The Ethics of Clinical Trials, University of Minnesota Gynecologic Oncology Consensus Conference, University of Minnesota, Minneapolis, MN, 5/8/2006

What you need to know - Hereditary Breast and Ovarian Cancer, UT M D Anderson Cancer Center and The San Antonio Chapter of Hadassah, San Antonio, TX, 10/26/2006

Progress and Treatment for Ovarian Cancer, UTMB - CME Grand Rounds, Galveston, TX, 2/14/2007

Comprehensive Management of Ovarian Cancer: Current Treatment and Maximizing Quality of Life, CME-Medical Communications Media, Novato Community Hospital, Novato, CA, 5/7/2007

Comprehensive Management of Ovarian Cancer: Current Treatment and Maximizing Quality of Life, Grand Rounds-Medical Communications Media, University of Pittsburgh, Pittsburgh, PA, 6/5/2007

Moderator - Stump the Professor, 37th Annual Meeting of the Felix Rutledge Society, Houston, TX, 6/13/2007

Ovarian Cancer Advisory Panel, Physician Oncology Education Program, Ovarian Cancer Advisory Panel Meeting, Texas Medical Association, Austin, TX, 12/10/2007

Lecturer: Teal Lunch for Life, "Ovarian Cancer: Top Ten Questions What you really need to know..." benefiting Blanton-Davis Ovarian Cancer Research Program, San Antonio, TX, September 10, 2008

Lecturer: E2 Communications-Opinions in Gyn Malignancies: An Interactive Forum and KOL Focus Group, Las Vegas, NV, October 18, 2008

Treatment of Ovarian Cancer - 21st Century and Beyond, Grand Rounds, UC Davis Medical Center, Gynecologic Oncology, Sacramento, CA, 12/17/2008

Lecturer: Shell Health - Shell Oil Company, Prevention and Gynecological Oncology, Houston, TX, April 6, 2009

Lecturer: Raising Ovarian Cancer Awareness to Increase Survival Rates; NOCC, Media Blitz in New York, NY, April 22-23, 2009

Speaker, Teal Lunch for Life, "Ovarian Cancer: What you need to know and how you can help..." benefiting Blanton-Davis Ovarian Cancer Research Program, San Antonio, TX, Sept. 9, 2009

Speaker, Key to the Cure Benefit, "Ovarian Cancer, Raise Awareness"; NOCC & Saks 5th Avenue-Austin, Austin, TX, September 17, 2009

Cervical Cancer Update Including the Role of Vaccines, SGO-Society of Gynecologic Oncologist, Educational Concepts Group, LLC, Oncobeat SGO: Reporting the News.Beating Cancer, San Antonio, TX, 2/8/2009

Gynecologic Cancers: Uterine Cancer, CME: Update on Endometrial Cancer, Citizens Medical Center, Office of Continuing Medical Education, Victoria, TX, 1/11/2010

Speaker, CME/CNE Ovarian Cancer Knowledge Video, Texas Medical Association, Ovarian Cancer Advisory Panel Meeting, Austin, TX, January 25, 2010

Wolf, JK. Strategies for the Management of Platinum-Resistant Ovarian Cancer, 41st Annual Meeting on Women's Cancer Society of Gynecologic Oncologist, CBCE - University of North Texas Health Science Center at Fort Worth, Center for Biomedical Continuing Education, San Francisco, CA, 3/15/2010

Ovarian Cancer, Women's Cancer Awareness Conference, Methodist Healthcare System, San Antonio, TX, 9/30/2010

#### **PROFESSIONAL MEMBERSHIPS/ACTIVITIES**

##### **Professional Society Activities, with Offices Held National and International**

American Association of Cancer Research

**Member**, 1996-2014

Felix Rutledge Society

**Member**, 1996-present

**Chairman**, Program Committee, 1999

**Co-Chairman**, Program Committee, 2007

**President**, 2008-2009

Society of Gynecologic Oncology

**Member**, 1996-present

**Member**, Program Committee, 1999

**Member**, Government Relations Committee, 2002-2011

**Co-Chair**, Government Relations Committee, 2005-2011

American Society of Clinical Oncology

**Member**, 1997-present

American College of Obstetrics and Gynecology

**Fellow**, 1999-present

Gynecologic Oncology Group

**Member**, Developmental Therapeutics Committee, 2001-2011

**Member**, Phase I Subcommittee, 2004-2011

NEOMED Alumni Board

Rootstown, OH

**Member** 2008-2014

Southern Regional Professional Development Conference for Women in Medicine and Research, Take charge of Your Life: Speak Up, Stand Out, and Stay Calm

**Member**, Planning Committee, 3/2007

American Gynecological & Obstetrical Society

**Fellow**, 11/2007–present

Southwest Oncology Group (SWOG), Seattle, WA

**Member**, 11/2010–2011

**Local/State**

Houston Gynecology & Obstetrics Society, Houston, TX

**Member**, 1996

**Treasurer**, 1998–2000

**Vice President**, 2001–2002

**President-Elect**, 2002–2003

**President**, 2003–2004

**Member**, 2004–2011

Ob-Gyn Alumni Association, The University of Texas Health Science Center at San Antonio, San Antonio, TX

**Member**, 1999

American Board of Obstetrics & Gynecology, Dallas, TX

**Oral Board Examiner**, 12/2008

**Oral Examiner**, 12/2009

**Examiner**, 12/2010

**MEDIA: LOCAL AND NATIONAL**

1. News Article on Women's Health On Alert Conference: Wiley, Miryam (Townsmen Correspondent) Women and hormonal health - the expert views. The Wellesley Townsman: townonline.com, April 7, 2005
2. Lecturer, Breaking the Silence on Ovarian Cancer - Diagnosis and Treatment; NOCC, State of Disease, Teleconference in Advance of Nation's Leading Cancer Meeting, Taped in New York, NY, Televised Live Across the Nation, May 22-23, 2006
3. Lecturer, Breaking the Silence on Ovarian Cancer - Diagnosis and Treatment; NOCC Media Initiative Magazine Interview, Interviewed in New York, NY, Fitness, MEDIZine's Healthy Living, Family Circle, Prevention, Cosmopolitan, Glamour, Woman's Day, O Magazine, March 11-13, 2007
4. Lecturer, Breaking the Silence on Ovarian Cancer Campaign, NOCC Media Alert Blitz on the Consensus of Ovarian Cancer; Teleconference in Advance of Nation's Leading Cancer Meeting, Taped in Houston, Texas, Televised Live Across the Nation, June 25, 2007
5. Dr. Oz Show appearance, Birth Control Pills and Risk of Ovarian Cancer, March 2012
6. I Heart Radio, "Preview of Highlights of San Antonio Breast Cancer Society Meeting", December 2013

#### **COMMUNITY**

1. Foundation Event – Development Reception for Banner MD Anderson Cancer Center, November 3, 2011
2. Foundation Event – Presentation at Vi Community, Scottsdale, Arizona 02/2012
3. Banner Health Foundation Lunch - JoAnn Orefice, Pat McKennon and Pat Carbone Tour and Lunch, March 30, 2012
4. Foundation Event – Freeport McMoRan Employee Campaign Launch, Phoenix, AZ, April 6, 2012
5. Surgery Grand Rounds, Banner Good Samaritan Hospital, Gynecologic Oncology 2012 Updates, Phoenix, AZ, March 2012
6. Foundation Event – Bill and Anne Smith Reception, Sedona, AZ April 21, 2012
7. Foundation Event – Presentation at Vi Community, Scottsdale, Arizona 09/12/2012
8. Speaker at 4th Annual Run/Walk for Ovarian Cancer, Break the Silence, NOCC 09/23/2012
9. Speaker at Association of Physician Assistants in Oncology, 2012 Annual Conference, Scottsdale, AZ 10/13/2012
10. Obesity and Cancer, Banner Gateway Medical Center Bariatric Grand Rounds, 02/2013
11. Advanced Leadership Program for Physicians, Banner Health, 2012-2013
12. Principal-Investigator, Various Donors, UT M. D. Anderson Cancer Center, 1999-Present, \$324,834
13. Selected 2013 *Top 50 Most Influential Women in Business*

#### **NATIONAL PROFESSIONAL LECTURES/TALKS**

Lecturer: **Strengthening Her Fight in the Battle Against Ovarian Cancer; Physicians Connect-Tibotec (Doxil) Pharmaceuticals & MediMedia**

Houston, TX, October 11, 2005

Woodlands, TX October 12, 2005

Moline, IL, October 25, 2005

Monrovia, CA, October 27, 2005

Grand Rapids, MI, December 15, 2005

Kansas City, MO, January 10, 2006

Houston, TX, October 17, 2006

Oklahoma City, OK, November 14, 2006

Woodlands, TX, April 23, 2007

Oklahoma City, OK, May 8, 2007

Houston, TX, June 12, 2007

Houston, TX, June 19, 2007

Houston, TX (MDACC), June 22, 2007

Houston, TX, October 17, 2007

Houston, TX, December 5, 2007

Houston, TX, June 6, 2008

Houston, TX, May 14, 2009

Lecturer: **Latest Developments in HPV-Related Diseases and Cervical Cancer; Merck i-Med Conference**

Lubbock, TX, September 26, 2006  
Dallas, TX, October 10, 2006  
Tyler, TX, October 24, 2006  
Harvey, LA, November 16, 2006  
Beaumont, TX, November 20, 2006  
Snyder, TX, November 21, 2006  
Bedford, TX, January 18, 2007  
Denver, CO, January 30, 2007  
Houston, TX, February 13, 2007  
Baytown, TX, February 20, 2007  
Houston, TX, March 14, 2007  
Austin, TX, March 28, 2007  
Arlington, TX, May 14, 2007  
Houston, TX (MDACC), May 18, 2007  
Webster, TX, May 23, 2007  
Woodlands, TX, June 7, 2007  
Dallas, TX, June 8, 2007  
Chicago, IL, July 23, 2007  
Nacogdoches, TX, October 30, 2007  
Houston, TX, November 11, 2007  
San Antonio, TX, November 14, 2007  
Dallas, TX, December 4, 2007  
Dallas, TX, December 14, 2007  
Grapevine, TX, February 4, 2008  
SanAntonio, TX, February 18, 2008  
San Angelo, TX, February 19, 2008  
Nacogdoches, TX, February 28, 2008  
Hutchinson, KS, May 12, 2008

Lecturer: **The Management of Cervical Cancer: Focus on Hycamtin; Advanced Communication and Education (ACE) - Glaxo Smith Klein (GSK)**

Beaumont, TX, October 30, 2006  
Corpus Christi, TX, November 27, 2006  
Lafayette, LA, November 28, 2006  
Lake Charles, LA, April 2, 2007

Grand Rounds Speaker: **Comprehensive Management of Ovarian Cancer: Current Treatment and Maximizing Quality of Life; Medical Communications Media Bureau**

Casper, WY, September 11, 2007  
Pensacola, FL, October 9, 2007  
Sugarland, TX, November 9, 2007  
Houston, TX, December 4, 2007  
Victoria, TX, December 5, 2007  
Birmingham, AL, April 1, 2008  
Kansas City, MO, May 7, 2008  
St. Petersburg, FL, August 21, 2008  
Victoria, TX, December 3, 2008  
Newport Beach, CA, December 4, 2008

Lecturer: **The Treatment of Platinum-Sensitive Advanced Ovarian Cancer; Lilly Lecturer Bureau**

Houston, TX, April 3, 2007  
Harlingen, TX, 12pm & 7pm, Jan 31, 2008  
McAllen, TX, March 26, 2008  
Brownsville, TX, March 26, 2008  
Jacksonville, FL, April 23, 2008  
Houston, TX, May 5-6, 2008  
Fort Worth, TX, May 14, 2008  
Wichita Falls, TX, May 14, 2008  
Houston, TX, May 15, 2008  
San Antonio, TX, May 28, 2008  
Houston, TX, June 4, 2008  
San Antonio, TX, July 2, 2008  
Beaumont, TX, July 23, 2008  
Fort Worth, TX, August 27, 2008  
Wichita Falls, TX, August 27, 2008  
Indianapolis, IN, (3-talks), September 3, 2008  
Corpus Christi, TX, September 17, 2008  
Laredo, TX, September 17, 2008  
San Antonio, TX, October, 22, 2008  
Temple, TX, May 22, 2009  
Laredo, TX, May 27, 2009  
McAllen, TX, May 28, 2009  
Houston, TX, June 4, 2009  
Houston, TX, June 17, 2009  
Beaumont, TX, August 6, 2009

**Volunteer and Advocacy**

1. Founder, Sprint for Life Fun Run, Raised over \$5 Million to Date For Ovarian Cancer Research, 1998-Present
2. National Ovarian Cancer Coalition- Member of medical advisory board 1996- 2008. Member of Governing Board 2009-present.
3. Society for Women's Health Research- Board Member 2014-present
4. Health Volunteers Overseas- 20-14- present. Volunteered in Viet Nam, Honduras, Haiti: Project Director Bhaktapur Nepal. Oncology Steering Committee Member.

CV updated; 01/05/2019

Judith K Wolf, MD

# Exhibit B

Judith Wolf, M.D.  
Materials Considered

1. "A Survey of the Long-Term Effects of Talc and Kaolin Pleurodesis." *British Journal of Diseases of the Chest* 73 (1979): 285–88.
2. Acencio, Milena M. P., Evaldo Marchi, Lisete R. Teixeira, Bruna Rocha Silva, Juliana Sanchez Silva, Carlos Sergio Rocha Silva, Vanessa Adelia Alvarenga, Leila Antonangelo, Francisco Suso Vargas, and Vera Luiza Capelozzi. "Talc Particles and Pleural Mesothelium Interface Modulate Apoptosis and Inflammation." *Pathology* 46, no. S2 (2014): S76.
3. Acheson, E D, M J Gardner, E C Pippard, and L P Grime. "Mortality of Two Groups of Women Who Manufactured Gas Masks from Chrysotile and Crocidolite Asbestos: A 40-Year Follow-Up." *British Journal of Industrial Medicine* 39, no. 4 (November 1982): 344–48.
4. ACOG. "Talc Use and Ovarian Cancer." Statements, September 11, 2017.
5. Akhtar, Mohd Javed, Maqsood Ahamed, M.A. Majeed Khan, Salman A. Alrokayan, Iqbal Ahmad, and Sudhir Kumar. "Cytotoxicity and Apoptosis Induction by Nanoscale Talc Particles from Two Different Geographical Regions in Human Lung Epithelial Cells." *Environmental Toxicology* 29 (2014): 394–406. <https://doi.org/10.1002/tox.21766>.
6. Akhtar, Mohd Javed, Sudhir Kumar, Ramesh Chandra Murthy, Mohd Ashquin, Mohd Imran Khan, Govil Patil, and Iqbal Ahmad. "The Primary Role of Iron-Mediated Lipid Peroxidation in the Differential Cytotoxicity Caused by Two Varieties of Talc Nanoparticles on A549 Cells and Lipid Peroxidation Inhibitory Effect Exerted by Ascorbic Acid." *Toxicology in Vitro: An International Journal Published in Association with BIBRA* 24, no. 4 (June 2010): 1139–47.
7. American Cancer Society. "Talcum Powder and Cancer." American Cancer Society, November 13, 2017.
8. Antoniou, A., et al. "Average Risks of Breast and Ovarian Cancer Associated with BRCA1 or BRCA2 Mutations Detected in Case Series Unselected for Family History: A Combined Analysis of 22 Studies." *American Journal of Human Genetics* 72, no. 5 (May 2003): 1117–30.
9. Amrhein, V., et al., "Retire statistical significance." *Nature*. 567 (2019): 305-307.
10. Arellano-Orden, Elena, Auxiliadora Romero-Falcon, Jose Martin Juan, Manuel Ocana Jurado, Francisco Rodriguez-Panadero, and Ana Montes-Worboys. "Small Particle-Size Talc Is Associated with Poor Outcome and Increased Inflammation in Thoracoscopic Pleurodesis." *Respiration* 86 (2013): 201–9. <https://doi.org/10.1159/000342042>.
11. "ATSDR - Toxicological Profile: Asbestos." Accessed August 16, 2018.
12. "ATSDR - Toxicological Profile: Silica." Accessed August 16, 2018.
13. Baldwin, Lauren A., Bin Huang, Rachel W. Miller, Thomas Tucker, Scott T. Goodrich, Iwona Podzielinski, Christopher P. DeSimone, Fred R. Ueland, John R. van Nagell, and Leigh G. Seamon. "Ten-Year Relative Survival for Epithelial Ovarian Cancer." *Obstetrics & Gynecology* 120, no. 3 (September 2012): 612–18.
14. Balkwill, Fran, and Alberto Mantovani. "Inflammation and Cancer: Back to Virchow?" *The Lancet* 357, no. 9255 (February 2001): 539–45. [https://doi.org/10.1016/S0140-6736\(00\)04046-0](https://doi.org/10.1016/S0140-6736(00)04046-0).
15. Barnhart, K., et al. "Baseline Dimensions of the Human Vagina." *Human Reproduction* Vol. 21, no. 6 (2006): 1618-22.
16. Bartrip, P. W. J. "History of Asbestos Related Disease." *Postgraduate Medical Journal* 80, no. 940 (February 1, 2004): 72–76. <https://doi.org/10.1136/pmj.2003.012526>.
17. Beck, B. D., H. A. Feldman, J. D. Brain, T. J. Smith, M. Hallock, and B. Gerson. "The

- Pulmonary Toxicity of Talc and Granite Dust as Estimated from an in Vivo Hamster Bioassay.” *Toxicology and Applied Pharmacology* 87, no. 2 (February 1987): 222–34.
18. Begg, Melissa D., and Dana March. “Cause and Association: Missing the Forest for the Trees.” *American Journal of Public Health* 108, no. 5 (May 2018): 620.
  19. Belotte, Jimmy, Nicole M. Fletcher, Awoniyi O. Awonuga, Mitchell Alexis, Husam M. Abu-Soud, Ghassan M. Saed, Michael P. Diamond, and Mohammed G. Saed. “The Role of Oxidative Stress in the Development of Cisplatin Resistance in Epithelial Ovarian Cancer.” *Reproductive Sciences* 21, no. 4 (2014): 503–8. <https://doi.org/10.1177/1933719113503403>.
  20. Belotte, Jimmy, Nicole M. Fletcher, Mohammed G. Saed, Mohammed S. Abusamaan, Gregory Dyson, Michael P. Diamond, and Ghassan M. Saed. “A Single Nucleotide Polymorphism in Catalase Is Strongly Associated with Ovarian Cancer Survival.” *PloS One* 10, no. 8 (2015).
  21. Berge, Wera, Kenneth Mundt, Hung Luu, and Paolo Boffetta. “Genital Use of Talc and Risk of Ovarian Cancer: A Meta-Analysis.” *European Journal of Cancer Prevention*, January 2017, 1.
  22. Berry, G., M. L. Newhouse, and J. C. Wagner. “Mortality from All Cancers of Asbestos Factory Workers in East London 1933-80.” *Occupational and Environmental Medicine* 57, no. 11 (November 2000): 782–85.
  23. Bertolotti, Marinella, Daniela Ferrante, Dario Mirabelli, Mario Botta, Marinella Nonnato, Annalisa Todesco, Benedetto Terracini, and Corrado Magnani. “[Mortality in the cohort of the asbestos cement workers in the Eternit plant in Casale Monferrato (Italy)].” *Epidemiologia E Prevenzione* 32, no. 4–5 (October 2008): 218–28.
  24. Blank, M M, N Wentzensen, M A Murphy, A Hollenbeck, and Y Park. “Dietary Fat Intake and Risk of Ovarian Cancer in the NIH-AARP Diet and Health Study.” *British Journal of Cancer* 106, no. 3 (January 31, 2012): 596–602.
  25. Blount, A M. “Amphibole Content of Cosmetic and Pharmaceutical Talcs.” *Environmental Health Perspectives* 94 (August 1991): 225–30.
  26. Bluemel, G., F. Piza, and Zischka-Konorsa W. “[Experimental animal research on the tissue reaction to starch and talc powder after their intraperitoneal use.].” *Wiener klinische Wochenschrift* 74 (January 1962): 12–13.
  27. Blumenkrantz, M. J., N. Gallagher, R. A. Bashore, and H. Tenckhoff. “Retrograde Menstruation in Women Undergoing Chronic Peritoneal Dialysis.” *Obstetrics and Gynecology* 57, no. 5 (May 1981): 667–70.
  28. Boorman, G. A., and J. C. Seely. “The Lack of an Ovarian Effect of Lifetime Talc Exposure in F344/N Rats and B6C3F1 Mice.” *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 242–43. <https://doi.org/10.1006/rtph.1995.1035>.
  29. Booth, M., V. Beral, and P. Smith. “Risk Factors for Ovarian Cancer: A Case-Control Study.” *British Journal of Cancer* 60, no. 4 (October 1989): 592–98.
  30. Bottazzi, Barbara, Elio Riboli, and Alberto Mantovani. “Aging, Inflammation and Cancer.” *Seminars in Immunology*, November 5, 2018. <https://doi.org/10.1016/j.smim.2018.10.011>.
  31. Bulbulyan, M. A., S. A. Ilychova, S. H. Zahm, S. V. Astashevsky, and D. G. Zaridze. “Cancer Mortality among Women in the Russian Printing Industry.” *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 166–71.
  32. Bunderson-Schelvan, Melisa, Jean C. Pfau, Robert Crouch, and Andrij Holian. “Nonpulmonary Outcomes of Asbestos Exposure.” *Journal of Toxicology and Environmental Health. Part B, Critical Reviews* 14, no. 1–4 (2011): 122–52. <https://doi.org/10.1080/10937404.2011.556048>.

33. Buz'Zard, Amber R., and Benjamin H. S. Lau. "Pycnogenol Reduces Talc-Induced Neoplastic Transformation in Human Ovarian Cell Cultures." *Phytotherapy Research: PTR* 21, no. 6 (June 2007): 579–86. <https://doi.org/10.1002/ptr.2117>.
34. Caldwell, Carlyle G., White Thomas Aubrey, William L. George, and James J. Eberl. Medical dusting powder. United States US2626257A, filed May 21, 1952, and issued January 20, 1953.
35. Camargo, M. Constanza, Leslie T. Stayner, Kurt Straif, Margarita Reina, Umaina Al-Alem, Paul A. Demers, and Philip J. Landrigan. "Occupational Exposure to Asbestos and Ovarian Cancer: A Meta-Analysis." *Environmental Health Perspectives* 119, no. 9 (September 2011): 1211–17.
36. Capital Breast Care Center, Georgetown University. "Ovarian Cancer." Capital Breast Care Center, April 14, 2016. <https://capitalbreastcare.georgetown.edu/health/ovarian>.
37. Capital Breast Care Center, Georgetown University. "Ovarian Cancer." Capital Breast Care Center, July 3, 2018. <https://capitalbreastcare.georgetown.edu/health/ovarian>.
38. Carr, C.J. "Talc: Consumer Uses and Health Perspectives" 21 (1995): 211–15.
39. Chang, S., and H. A. Risch. "Perineal Talc Exposure and Risk of Ovarian Carcinoma." *Cancer* 79, no. 12 (June 15, 1997): 2396–2401.
40. Chang, Che-Jui, Yu-Kang Tu, Pau-Chung Chen, and Hsiao-Yu Yang. "Occupational Exposure to Talc Increases the Risk of Lung Cancer: A Meta-Analysis of Occupational Cohort Studies." *Canadian Respiratory Journal*, 2017.
41. Chen, F., K. Gaitskell, M. J. Garcia, A. Albukhari, J. Tsaltas, and A. A. Ahmed. "Serous Tubal Intraepithelial Carcinomas Associated with High-Grade Serous Ovarian Carcinomas: A Systematic Review." *BJOG: An International Journal of Obstetrics and Gynaecology* 124, no. 6 (May 2017): 872–78.
42. Chen, L-M, et al. "Epithelial Carcinoma of the Ovary, Fallopian Tube, and Peritoneum: Epidemiology and Risk Factors - UpToDate," 2018.
43. Chen, L-M, et al. "Overview of Epithelial Carcinoma of the Ovary, Fallopian Tube, and Peritoneum - UpToDate," 2018.
44. Chen, Y., P. C. Wu, J. H. Lang, W. J. Ge, P. Hartge, and L. A. Brinton. "Risk Factors for Epithelial Ovarian Cancer in Beijing, China." *International Journal of Epidemiology* 21, no. 1 (February 1992): 23–29.
45. Chien, Jeremy, Hugues Sicotte, Jian-Bing Fan, Sean Humphray, Julie M. Cunningham, Kimberly R. Kalli, Ann L. Oberge, et al. "TP53 Mutations, Tetraploidy and Homologous Recombination Repair Defects in Early Stage High-Grade Serous Ovarian Cancer." *Nucleic Acids Research* 43, no. 14 (August 18, 2015): 6945–58.
46. Cibula, D., M. Widschwendter, O. Májek, and L. Dusek. "Tubal Ligation and the Risk of Ovarian Cancer: Review and Meta-Analysis." *Human Reproduction Update* 17, no. 1 (January 1, 2011): 55–67.
47. Cibula, David, Martin Widschwendter, Michael Zikan, and Ladislav Dusek. "Underlying Mechanisms of Ovarian Cancer Risk Reduction after Tubal Ligation." *Acta Obstetrica Et Gynecologica Scandinavica* 90, no. 6 (June 2011): 559–63.
48. CIMBA, Georgia Chenevix-Trench, Roger L Milne, Antonis C Antoniou, Fergus J Couch, Douglas F Easton, and David E Goldgar. "An International Initiative to Identify Genetic Modifiers of Cancer Risk in BRCA1 and BRCA2 Mutation Carriers: The Consortium of Investigators of Modifiers of BRCA1 and BRCA2 (CIMBA)." *Breast Cancer Research* 9, no. 2 (December 2007). <https://doi.org/10.1186/bcr1670>.
49. Cohen, Samuel M., and Lora L. Arnold. "Chemical Carcinogenesis." *Toxicological Sciences* 120, no. suppl\_1 (March 1, 2011): S76–92. <https://doi.org/10.1093/toxsci/kfq365>.

50. Colditz, Graham A. "Cancer Prevention." *UpToDate*, 2018.
51. Collaborative Group on Epidemiological Studies of Ovarian Cancer, V. Beral, R. Doll, C. Hermon, R. Peto, and G. Reeves. "Ovarian Cancer and Oral Contraceptives: Collaborative Reanalysis of Data from 45 Epidemiological Studies Including 23,257 Women with Ovarian Cancer and 87,303 Controls." *Lancet* 371, no. 9609 (January 26, 2008): 303–14.
52. Collaborative Group On Epidemiological Studies Of Ovarian Cancer, V. Beral, K. Gaitskell, C. Hermon, K. Moser, G. Reeves, and R. Peto. "Menopausal Hormone Use and Ovarian Cancer Risk: Individual Participant Meta-Analysis of 52 Epidemiological Studies." *Lancet (London, England)* 385, no. 9980 (May 9, 2015): 1835–42.
53. Committee on Practice Bulletins–Gynecology, Committee on Genetics, Society of Gynecologic Oncology. "Practice Bulletin No 182: Hereditary Breast and Ovarian Cancer Syndrome." *Obstetrics and Gynecology* 130, no. 3 (2017): e110–26.
54. Committee on the State of the Science in Ovarian Cancer Research, Board on Health Care Services, Institute of Medicine, and National Academies of Sciences, Engineering, and Medicine. *Ovarian Cancers: Evolving Paradigms in Research and Care*. Washington (DC): National Academies Press (US), 2016. <http://www.ncbi.nlm.nih.gov/books/NBK367618/>
55. Cook, Linda S., Mary L. Kamb, and Noel S. Weiss. "Perineal Powder Exposure and the Risk of Ovarian Cancer." *American Journal of Epidemiology* 145, no. 5 (March 1, 1997): 459–65.
56. Cook, LS. "Erratum in 'Perineal Powder Exposure and the Risk of Ovarian Cancer'." *American Journal of Epidemiology* 148, no. 410 (1997).
57. Coussens, Lisa M., and Zena Werb. "Inflammation and Cancer." *Nature* 420, no. 6917 (December 19, 2002): 860–67. <https://doi.org/10.1038/nature01322>.
58. Cramer, Daniel W. and Allison F. Vitonis. "Signatures of Reproductive Events on Blood Counts and Biomarkers of Inflammation: Implications for Chronic Disease Risk." *PLoS ONE* 12(2) (2017).
59. Cramer, D. W. "Perineal Talc Exposure and Subsequent Epithelial Ovarian Cancer: A Case-Control Study." *Obstetrics and Gynecology* 94, no. 1 (July 1999): 160–61.
60. Cramer, D. W., R. F. Liberman, L. Titus-Ernstoff, W. R. Welch, E. R. Greenberg, J. A. Baron, and B. L. Harlow. "Genital Talc Exposure and Risk of Ovarian Cancer." *International Journal of Cancer* 81, no. 3 (May 5, 1999): 351–56.
61. Cramer, D. W., W. R. Welch, R. E. Scully, and C. A. Wojciechowski. "Ovarian Cancer and Talc: A Case-Control Study." *Cancer* 50, no. 2 (July 15, 1982): 372–76.
62. Cramer, Daniel W., Linda Titus-Ernstoff, John R. McKolanis, William R. Welch, Allison F. Vitonis, Ross S. Berkowitz, and Olivera J. Finn. "Conditions Associated with Antibodies Against the Tumor-Associated Antigen MUC1 and Their Relationship to Risk for Ovarian Cancer." *Cancer Epidemiology Biomarkers & Prevention* 14, no. 5 (May 1, 2005): 1125–31.
63. Cramer, Daniel W., Allison F. Vitonis, Kathryn L. Terry, William R. Welch, and Linda J. Titus. "The Association Between Talc Use and Ovarian Cancer: A Retrospective Case-Control Study in Two US States." *Epidemiology (Cambridge, Mass.)* 27, no. 3 (May 2016): 334–46.
64. Cramer, Daniel W., William R. Welch, Ross S. Berkowitz, and John J. Godleski. "Presence of Talc in Pelvic Lymph Nodes of a Woman with Ovarian Cancer and Long-Term Genital Exposure to Cosmetic Talc." *Obstetrics and Gynecology* 110, no. 2 Pt 2 (August 2007): 498–501.
65. Crum, Christopher P, Jonathan Bijron, and Brooke E. Howitt. "Pathogenesis of Ovarian, Fallopian Tubal, and Peritoneal Serous Carcinomas." *UpToDate*, 2018.
66. Crusz, Shanthini M., and Frances R Balkwill. "Inflammation and Cancer: Advances and New Agents." *Nature Reviews Clinical Oncology* 12 (October 2015): 584–96.

67. Curtis D. Klaassen, and John Doull. Casarett and Doull's Toxicology: The Basic Science of Poisons. 8th Edition. McGraw-Hill Education, 2013.
68. "Deposition & Exhibits of John Hopkins, PhD, MDL No. 2738." In re: Talcum Powder Prod. Liab. Litig., August 16, 2018.
69. "Deposition & Exhibits of Julie Pier, MDL No. 2738." In re: Talcum Powder Prod. Liab. Litig., September 12, 2018.
70. Ding, Yuan C., Lesley McGuffog, Sue Healey, Eitan Friedman, Yael Laitman, Shani- Paluch-Shimon, Bella Kaufman, et al. "A Nonsynonymous Polymorphism in IRS1 Modifies Risk of Developing Breast and Ovarian Cancers in BRCA1 and Ovarian Cancer in BRCA2 Mutation Carriers." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21, no. 8 (August 2012): 1362–70.
71. DiSaia, PJ, WT Creasman, RS Mannell, S McMeekin, and D Mutch. *Clinical Gynecologic Oncology / [Edited by] Philip J. DiSaia, William T. Creasman, Robert S. Mannell, Scott McMeekin, David G. Mutch*. 9th ed. Philadelphia, PA: Elsevier, 2018.
72. Dixon, Suzanne C., Christina M. Nagle, Nicolas Wentzensen, Britton Trabert, Alicia Beeghly-Fadiel, Joellen M. Schildkraut, Kirsten B. Moysich, et al. "Use of Common Analgesic Medications and Ovarian Cancer Survival: Results from a Pooled Analysis in the Ovarian Cancer Association Consortium." *British Journal of Cancer* 116, no. 9 (April 25, 2017): 1223–28.
73. Dodson, R. F., M. O'Sullivan, C. J. Corn, and S. P. Hammar. "Quantitative Comparison of Asbestos and Talc Bodies in an Individual with Mixed Exposure." *American Journal of Industrial Medicine* 27, no. 2 (February 1995): 207–15.
74. D.R. Petterson. "JNJ 000251888," April 26, 1973.
75. Dubeau, L., and R. Drapkin. "Coming into Focus: The Nonovarian Origins of Ovarian Cancer." *Annals of Oncology: Official Journal of the European Society for Medical Oncology* 24 Suppl 8 (November 2013): viii28–35.
76. Dydek, Thomas. "Educational Report of Thomas Dydek, Ph.D., DABT, PE, Regarding the Cancer Causing Constituents of Defendants' Talcum Powder Products, In Re: Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Products Liability Litigation MDL No. 2738," April 9, 2018.
77. Eberl, J. J., and W. L. George. "Comparative Evaluation of the Effects of Talcum and a New Absorbable Substitute on Surgical Gloves." *American Journal of Surgery* 75, no. 3 (March 1948): 493–97.
78. Egilman, David, Joan E. Steffan, Triet Tran, Kate Clancy, Mark Rigler and William Longo. "Health Effects of Censored Elongated Mineral Particles: A Critical Review." *STP* 1618 (2019), 192-239.
79. Egilman D, Madigan D, Yimam M, Tran T. "Evidence that cosmetic talc is a cause of ovarian cancer." *Gynecol Pelvic Med* 2020.
80. Egli, G. E., and M. Newton. "The Transport of Carbon Particles in the Human Female Reproductive Tract." *Fertility and Sterility* 12 (April 1961): 151–55.
81. Eng, Kevin H., J. Brian Szender, John Lewis Etter, Jasmine Kaur, Samantha Poblete, Ruea-Yea Huang, Qianqian Zhu, et al. "Paternal Lineage Early Onset Hereditary Ovarian Cancers: A Familial Ovarian Cancer Registry Study." *PLoS Genetics* 14, no. 2 (February 2018): e1007194.
82. "Expert Report of Michael Crowley, Ph.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738," November 12, 2018.
83. "Expert Report of Anne McTiernan, M.D., Ph.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738," November 16, 2018.

84. “Expert Report of Rebecca Smith-Bindman, M.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738,” November 12, 2018.
85. “Expert Report of Patricia G. Moorman Entitled Scientific Review of the Epidemiologic Evidence on Talc Use and Ovarian Cancer,” dated November 16, 2018.
86. Fasching, Peter A., Simon Gayther, Leigh Pearce, Joellen M. Schildkraut, Ellen Goode, Falk Thiel, Georgia Chenevix-Trench, et al. “Role of Genetic Polymorphisms and Ovarian Cancer Susceptibility.” *Molecular Oncology* 3, no. 2 (April 2009): 171–81.
87. Fathalla, M. F. “Incessant Ovulation and Ovarian Cancer - a Hypothesis Re-Visited.” *Facts, Views & Vision in ObGyn* 5, no. 4 (2013): 292–97.
88. Fathalla, M. F. “Incessant Ovulation--a Factor in Ovarian Neoplasia?” *Lancet* 2, no. 7716 (July 17, 1971): 163.
89. FDA. “Ltr to Samuel S. Epstein, M.D., RE: Docket Numbers 94P-0420 and FDA-2008-P-0309-0001/CP,” April 1, 2017.
90. Fedak, Kristen M., Autumn Bernal, Zachary A. Capshaw, and Sherilyn Gross. “Applying the Bradford Hill Criteria in the 21st Century: How Data Integration Has Changed Causal Inference in Molecular Epidemiology.” *Emerging Themes in Epidemiology* 12, no. 14 (2015).
91. “Federal Register Vol. 81, No.243, December 19, 2016 FDA Ban on Surgical Gloves.” Accessed August 16, 2018.
92. Ferguson, Lynnette R. “Chronic Inflammation and Mutagenesis.” *Mutation Research* 690, no. 1–2 (August 7, 2010): 3–11. <https://doi.org/10.1016/j.mrfmmm.2010.03.007>.
93. Fernandes, José Veríssimo, Ricardo Ney Oliveira Cobucci, Carlos André Nunes Jatobá, Thales. “The Role of the Mediators of Inflammation in Cancer Development.” *Pathol. Oncol. Res.* (2015) 21:527–534.
94. Ferrer, Jaume, Juan F. Montes, Maria A. Villarino, Richard W. Light, and José García-Valero. “Influence of Particle Size on Extrapleural Talc Dissemination after Talc Slurry Pleurodesis.” *Chest* 122, no. 3 (September 2002): 1018–27.
95. Ferrante, Daniela, Marinella Bertolotti, Annalisa Todesco, Dario Mirabelli, Benedetto Terracini, and Corrado Magnani. “Cancer Mortality and Incidence of Mesothelioma in a Cohort of Wives of Asbestos Workers in Casale Monferrato, Italy.” *Environmental Health Perspectives* 115, no. 10 (October 2007): 1401–5. <https://doi.org/10.1289/ehp.10195>.
96. Fiume, Monice M., Ivan Boyer, Wilma F. Bergfeld, Donald V. Belsito, Ronald A. Hill, Curtis D. Klaassen, Daniel C. Liebler, et al. “Safety Assessment of Talc as Used in Cosmetics.” *International Journal of Toxicology* 34, no. 1 suppl (July 1, 2015): 66S-129S.
97. Fletcher, Nicole M., Jimmy Belotte, Mohammed G. Saed, Ira Memaj, Michael P. Diamond, Robert T. Morris, and Ghassan M. Saed. “Specific Point Mutations in Key Redox Enzymes Are Associated with Chemoresistance in Epithelial Ovarian Cancer.” *Free Radical Biology and Medicine* 102 (2017): 122–32. <https://doi.org/10.1016/j.freeradbiomed.2016.11.028>.
98. Fletcher, Nicole M., Zhongliang Jiang, Rouba Ali-Fehmi, Nancy K. Levin, Jimmy Belotte, Michael A. Tainsky, Michael P. Diamond, Husam M. Abu-Soud, and Ghassan M. Saed. “Myeloperoxidase and Free Iron Levels: Potential Biomarkers for Early Detection and Prognosis of Ovarian Cancer.” *Cancer Biomarkers* 10 (2012 2011): 267–75. <https://doi.org/10.3233/CBM-2012-0255>.
99. Fletcher, Nicole, Memaj, Ira, and Saed, Ghassan. “Talcum Powder Enhances Oxidative Stress in Ovarian Cancer Cells.” *Reproductive Sciences*, February 28, 2018.
100. Fletcher, NM, and GM Saed. “Talcum Powder Enhances Cancer Antigen 125 Levels in Ovarian Cancer Cells.” *Presented at the 65th Meeting of the Society for Reproductive Investigation, San Diego, California*, 2018.

101. Fletcher, NM, Amy K Harper, Ira Memaj, Rong Fan, Robert T. Morris and GM Saed. “Molecular Basis Supporting the Association of Talcum Powder Use with Increased Risk of Ovarian Cancer.” *Reproductive Sciences* 1-10 (2019).
102. Folkins, Ann K., Elke A. Jarboe, Jonathan L. Hecht, Michael G. Muto, and Christopher P. Crum. “Chapter 24 - Assessing Pelvic Epithelial Cancer Risk and Intercepting Early Malignancy.” In *Diagnostic Gynecologic and Obstetric Pathology (Third Edition)*, 844–64. Philadelphia: Content Repository Only!, 2018. <https://doi.org/10.1016/B978-0-323-44732-4.00024-8>.
103. Ford, D., D.F. Easton, M. Stratton, S. Narod, D. Goldgar, P. Devilee, D.T. Bishop, et al. “Genetic Heterogeneity and Penetrance Analysis of the BRCA1 and BRCA2 Genes in Breast Cancer Families.” *The American Journal of Human Genetics* 62, no. 3 (March 1998): 676–89.
104. Freedman, Ralph S, Michael Deavers, Jinsong Liu, and Ena Wang. “Peritoneal Inflammation – A Microenvironment for Epithelial Ovarian Cancer (EOC).” *Journal of Translational Medicine* 2, no. 23 (2004). <https://doi.org/10.1186/1479-5876-2-23>.
105. Friebe, Tara M., Susan M. Domchek, and Timothy R. Rebbeck. “Modifiers of Cancer Risk in BRCA1 and BRCA2 Mutation Carriers: Systematic Review and Meta-Analysis.” *Journal of the National Cancer Institute* 106, no. 6 (June 2014): dju091. <https://doi.org/10.1093/jnci/dju091>.
106. Frost, G. “The Latency Period of Mesothelioma among a Cohort of British Asbestos Workers (1978-2005).” *British Journal of Cancer* 109, no. 7 (October 1, 2013): 1965–73.
107. Galea, Sandro, and Roger D. Vaughan. “Moving Beyond the Cause Constraint: A Public Health of Consequence, May 2018.” *American Journal of Public Health* 108, no. 5 (May 2018): 602–3.
108. Gates, Margaret A., Bernard A. Rosner, Jonathan L. Hecht, and Shelley S. Tworoger. “Risk Factors for Epithelial Ovarian Cancer by Histologic Subtype.” *American Journal of Epidemiology* 171, no. 1 (January 1, 2010): 45–53. <https://doi.org/10.1093/aje/kwp314>.
109. Gates, Margaret A., Shelley S. Tworoger, Kathryn L. Terry, Linda Titus-Ernstoff, Bernard Rosner, Immaculata De Vivo, Daniel W. Cramer, and Susan E. Hankinson. “Talc Use, Variants of the GSTM1, GSTT1, and NAT2 Genes, and Risk of Epithelial Ovarian Cancer.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 17, no. 9 (September 2008): 2436–44. <https://doi.org/10.1158/1055-9965.EPI-08-0399>.
110. Genofre, Eduardo H., Francisco S. Vargas, Milena M. P. Acencio, Leila Antonangelo, Lisete R. Teixeira, and Evaldo Marchi. “Talc Pleurodesis: Evidence of Systemic Inflammatory Response to Small Size Talc Particles.” *Respiratory Medicine* 103, no. 1 (January 2009): 91–97.
111. Germani, D., S. Belli, C. Bruno, M. Grignoli, M. Nesti, R. Pirastu, and P. Comba. “Cohort Mortality Study of Women Compensated for Asbestosis in Italy.” *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 129–34.
112. Gertig, D. M., D. J. Hunter, D. W. Cramer, G. A. Colditz, F. E. Speizer, W. C. Willett, and S. E. Hankinson. “Prospective Study of Talc Use and Ovarian Cancer.” *Journal of the National Cancer Institute* 92, no. 3 (February 2, 2000): 249–52.
113. Ghio, Andrew J., Joleen M. Soukup, Lisa A. Dailey, Judy H. Richards, Jennifer L. Turi, Elizabeth N. Pavlisko, and Victor L. Roggli. “Disruption of Iron Homeostasis in Mesothelial Cells after Talc Pleurodesis.” *American Journal of Respiratory Cell and Molecular Biology* 46, no. 1 (January 1, 2012): 80–86. <https://doi.org/10.1165/rcmb.2011-0168OC>.
114. Godard, B., W. D. Foulkes, D. Provencher, J. S. Brunet, P. N. Tonin, A. M. Mes-Masson, S. A. Narod, and P. Ghadirian. “Risk Factors for Familial and Sporadic Ovarian Cancer among French Canadians: A Case-Control Study.” *American Journal of Obstetrics and Gynecology* 179, no. 2 (August 1998): 403–10.

115. Gondal, Mohammed A., Mohamed A. Dastageer, Akhtar A. Naqvi, Anvar A. Isab, and Yasin W. Maganda. "Detection of Toxic Metals (Lead and Chromium) in Talcum Powder Using Laser Induced Breakdown Spectroscopy." *Applied Optics* 51, no. 30 (October 20, 2012): 7395–7401.
116. Gonzalez, Nicole L., Katie M. O'Brien, Aimee A. D'Aloisio, Dale P. Sandler, and Clarice R. Weinberg. "Douching, Talc Use, and Risk of Ovarian Cancer." *Epidemiology (Cambridge, Mass.)* 27, no. 6 (2016): 797–802. <https://doi.org/10.1097/EDE.0000000000000528>.
117. Goodman, Marc T, Galina Lurie, Pamela J Thompson, Katharine E McDuffie, and Michael E Carney. "Association of Two Common Single-Nucleotide Polymorphisms in the CYP19A1 Locus and Ovarian Cancer Risk." *Endocrine-Related Cancer* 15, no. 4 (December 2008): 1055–60.
118. Gordon, Ronald E., Sean Fitzgerald, and James Millette. "Asbestos in Commercial Cosmetic Talcum Powder as a Cause of Mesothelioma in Women." *International Journal of Occupational and Environmental Health* 20, no. 4 (October 2014): 318–32.
119. Graham, J. D. P., and M. E. Jenkins. "Value of Modified Starch as a Substitute for Talc." *Lancet (London, England)* 1, no. 6708 (March 22, 1952): 590–91.
120. Graham, J., and R. Graham. "Ovarian Cancer and Asbestos." *Environmental Research* 1, no. 2 (October 1967): 115–28.
121. Green, A., D. Purdie, C. Bain, V. Siskind, P. Russell, M. Quinn, and B. Ward. "Tubal Sterilisation, Hysterectomy and Decreased Risk of Ovarian Cancer. Survey of Women's Health Study Group." *International Journal of Cancer. Journal International Du Cancer* 71, no. 6 (June 11, 1997): 948–51.
122. Grivennikov, Sergei I., Florian R. Greten, and Michael Karin. "Immunity, Inflammation, and Cancer." *Cell* 140, no. 6 (March 19, 2010): 883–99. <https://doi.org/10.1016/j.cell.2010.01.025>.
123. Gross, A. J., and P. H. Berg. "A Meta-Analytical Approach Examining the Potential Relationship between Talc Exposure and Ovarian Cancer." *Journal of Exposure Analysis and Environmental Epidemiology* 5, no. 2 (June 1995): 181–95.
124. Halme, J., M. G. Hammond, J. F. Hulka, S. G. Raj, and L. M. Talbert. "Retrograde Menstruation in Healthy Women and in Patients with Endometriosis." *Obstetrics and Gynecology* 64, no. 2 (August 1984): 151–54.
125. Hamilton, T. C., H. Fox, C. H. Buckley, W. J. Henderson, and K. Griffiths. "Effects of Talc on the Rat Ovary." *British Journal of Experimental Pathology* 65, no. 1 (February 1984): 101–6.
126. Hankinson, S. E., D. J. Hunter, G. A. Colditz, W. C. Willett, M. J. Stampfer, B. Rosner, C. H. Hennekens, and F. E. Speizer. "Tubal Ligation, Hysterectomy, and Risk of Ovarian Cancer. A Prospective Study." *JAMA* 270, no. 23 (December 15, 1993): 2813–18.
127. Harlow, B. L., and P.A. Hartge. "A Review of Perineal Talc Exposure and Risk of Ovarian Cancer." *Regulatory Toxicology and Pharmacology*: RTP 21, no. 2 (April 1995): 254-60.
128. Harlow, B. L., D. W. Cramer, D. A. Bell, and W. R. Welch. "Perineal Exposure to Talc and Ovarian Cancer Risk." *Obstetrics and Gynecology* 80, no. 1 (July 1992): 19–26.
129. Harlow, B. L., and D. W. Cramer. "Self-Reported Use of Antidepressants or Benzodiazepine Tranquilizers and Risk of Epithelial Ovarian Cancer: Evidence from Two Combined Case-Control Studies (Massachusetts, United States)." *Cancer Causes & Control: CCC* 6, no. 2 (March 1995): 130–34.
130. Hartge, P., R. Hoover, L. P. Leshner, and L. McGowan. "Talc and Ovarian Cancer." *JAMA: The Journal of the American Medical Association* 250, no. 14 (October 14, 1983): 1844.
131. Hasselbalch, Hans Carl. "Chronic Inflammation as a Promotor of Mutagenesis in Essential Thrombocythemia, Polycythemia Vera and Myelofibrosis. A Human Inflammation Model for Cancer Development?" *Leukemia Research* 37, no. 2 (February 2013): 214-20.

132. Heller, D. S., R. E. Gordon, and N. Katz. "Correlation of Asbestos Fiber Burdens in Fallopian Tubes and Ovarian Tissue." *American Journal of Obstetrics and Gynecology* 181, no. 2 (August 1999): 346–47.
133. Heller, D. S., R. E. Gordon, C. Westhoff, and S. Gerber. "Asbestos Exposure and Ovarian Fiber Burden." *American Journal of Industrial Medicine* 29, no. 5 (May 1996): 435–39.
134. Heller, D. S., C. Westhoff, R. E. Gordon, and N. Katz. "The Relationship between Perineal Cosmetic Talc Usage and Ovarian Talc Particle Burden." *American Journal of Obstetrics and Gynecology* 174, no. 5 (May 1996): 1507–10.
135. Henderson, W. J., T. C. Hamilton, and K. Griffiths. "Talc in Normal and Malignant Ovarian Tissue." *Lancet* 1, no. 8114 (March 3, 1979): 499.
136. Henderson, W. J., C. A. Joslin, A. C. Turnbull, and K. Griffiths. "Talc and Carcinoma of the Ovary and Cervix." *The Journal of Obstetrics and Gynaecology of the British Commonwealth* 78, no. 3 (March 1971): 266–72.
137. Henderson, W. J., T. C. Hamilton, M. S. Baylis, C. G. Pierrepont, and K. Griffiths. "The Demonstration of the Migration of Talc from the Vagina and Posterior Uterus to the Ovary in the Rat." *Environmental Research* 40, no. 2 (August 1986): 247–50.
138. Hernán, Miguel A. "The C-Word: Scientific Euphemisms Do Not Improve Causal Inference From Observational Data." *American Journal of Public Health* 108, no. 5 (May 2018): 616–19.
139. Hill, Austin Bradford. "The Environment and Disease: Association or Causation?" *Proceedings of the Royal Society of Medicine* 58, no. 5 (May 1965): 295–300.
140. Hillegass, Jedd M., Arti Shukla, Maximilian B. MacPherson, Jeffrey P. Bond, Chad Steele, and Brooke T. Mossman. "Utilization of Gene Profiling and Proteomics to Determine Mineral Pathogenicity in a Human Mesothelial Cell Line (LP9/TERT-1)." *Journal of Toxicology and Environmental Health. Part A* 73, no. 5 (January 2010): 423–36.
141. Hollinger, M. A. "Pulmonary Toxicity of Inhaled and Intravenous Talc." *Toxicology Letters* 52, no. 2 (July 1990): 121–27; discussion 117–119.
142. Houghton, Serena C., Katherine W. Reeves, Susan E. Hankinson, Lori Crawford, Dorothy Lane, Jean Wactawski-Wende, Cynthia A. Thomson, Judith K. Ockene, and Susan R. Sturgeon. "Perineal Powder Use and Risk of Ovarian Cancer." *Journal of the National Cancer Institute* 106, no. 9 (September 2014). <https://doi.org/10.1093/jnci/dju208>.
143. Huncharek, Michael, J. F. Geschwind, and Bruce Kupelnick. "Perineal Application of Cosmetic Talc and Risk of Invasive Epithelial Ovarian Cancer: A Meta-Analysis of 11,933 Subjects from Sixteen Observational Studies." *Anticancer Research* 23, no. 2C (April 2003): 1955–60.
144. Huncharek, Michael, Joshua Muscat, Adedayo Onitilo, and Bruce Kupelnick. "Use of Cosmetic Talc on Contraceptive Diaphragms and Risk of Ovarian Cancer: A Meta-Analysis of Nine Observational Studies." *European Journal of Cancer Prevention: The Official Journal of the European Cancer Prevention Organisation (ECP)* 16, no. 5 (October 2007): 422–29.
145. Hunn, Jessica, and Gustavo C. Rodriguez. "Ovarian Cancer: Etiology, Risk Factors, and Epidemiology." *Clinical Obstetrics and Gynecology* 55, no. 1 (March 2012): 3–23.
146. IARC. "IARC Monographs on the Evaluation of the Carcinogenic Risk to Humans: Man-Made Mineral Fibers and Radon, Volume 43." IARC, Lyon France, 1988.
147. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Cobalt in Hard Metals and Cobalt Sulfate, Gallium Arsenide, Indium Phosphide and Vanadium Pentoxide." *World Health Organization* 86 (2006). <https://monographs.iarc.fr/iarc-monographs-on-the-evaluation-of-carcinogenic-risks-to-humans-35/>.

148. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Inorganic and Organic Lead Compounds." *World Health Organization* 87 (2006).
149. "IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Some Traditional Herbal Medicines, Some Mycotoxins, Naphthalene and Styrene" 82 (2002).
150. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 100C," 2012.
151. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. "Carbon Black, Titanium Dioxide, and Talc." *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans / World Health Organization, International Agency for Research on Cancer* 93 (2010): 1– 413.
152. IARC. "IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans: Silica and Some Silicates." IARC, 1987.
153. IARC. "IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. Overall Evaluations of Carcinogenicity: An Updating of IARC Monographs Volumes 1-42. Supplement 7," 1987. <https://monographs.iarc.fr/wpcontent/uploads/2018/06/Suppl7.pdf>.
151. IMERYS209971
152. "Inflammation: A Hidden Path to Breaking the Spell of Ovarian Cancer." *Cell Cycle* 8, no. 19 (2009): 3107–11.
153. Institute of Medicine (IOM) Committee on the State of Science in Ovarian Cancer Research. *Ovarian Cancers: Evolving Paradigms in Research and Care*. The National Academies of Sciences, Engineering and Medicine. Washington (DC): National Academies Press (US), 2016.
154. Institute of Medicine (US) Committee on Asbestos: Selected Health Effects. *Asbestos: Selected Cancers*. The National Academies Collection: Reports Funded by National Institutes of Health. Washington (DC): National Academies Press (US), 2006.
155. Iturralde, M., and P. F. Venter. "Hysterosalpingo-Radionuclide Scintigraphy (HERS)." *Seminars in Nuclear Medicine* 11, no. 4 (October 1981): 301–14.
156. Jaurand, M. C. "Mechanisms of Fiber-Induced Genotoxicity." *Environmental Health Perspectives* 105 Suppl 5 (September 1997): 1073–84.
157. Jaurand. "Particulate-State Carcinogenesis: A Survey of Recent Studies on the Mechanisms of Action of Fibres." *IARC Scientific Publications*, no. 90 (1989): 54–73
158. Jaurand, MC. "Mechanisms of Fibre Genotoxicity." In *Mechanisms in Fibre Carcinogenesis*. New York: Plenum Press, 1991.
159. Jia, D, Y Nagaoka, S Orsulic, and M Katsumata. "Inflammation Is a Key Contributor to Ovarian Cancer Cell Seeding." *Scientific Reports* 8, no. 12394 (August 17, 2018).
160. Jervis, Sarah, Honglin Song, Andrew Lee, Ed Dicks, Jonathan Tyrer, Patricia Harrington, Douglas F. Easton, Ian J. Jacobs, Paul P. D. Pharoah, and Antonis C. Antoniou. "Ovarian Cancer Familial Relative Risks by Tumour Subtypes and by Known Ovarian Cancer Genetic Susceptibility Variants." *Journal of Medical Genetics* 51, no. 2 (February 2014): 108–13.
161. Jiang, Zhongliang, Nicole M. Fletcher, Rouba Ali-Fehmi, Michael P. Diamond, Husam M. Abu-Soud, Adnan R. Munkarah, and Ghassan M. Saed. "Modulation of Redox Signaling Promotes Apoptosis in Epithelial Ovarian Cancer Cells." *Gynecologic Oncology* 122, no. 2 (August 2011): 418–23. <https://doi.org/10.1016/j.ygyno.2011.04.051>.
162. Johnson & Johnson. "A Message about Talc." A message about talc, May 2, 2016.
163. Jones, Richard E. *Human Reproductive Biology, Second Edition*. 2 edition. San Diego: Academic Press, 1997.
164. Jurinski, Joseph B., and J. Donald Rimstidt. "Biodurability of Talc." *American Mineralogist* 86,

- no. 4 (April 2001): 392–99. <https://doi.org/10.2138/am-2001-0402>.
165. Kane, AB, P Boffetta, R Saracci, and JD Wilbourn. “Mechanisms of Fibre Carcinogenesis.” IARC, 1996.
  166. Kang, N., D. Griffin, and H. Ellis. “The Pathological Effects of Glove and Condom Dusting Powders.” *Journal of Applied Toxicology: JAT* 12, no. 6 (December 1992): 443–49.
  167. Karageorgi, Stalo, Margaret A. Gates, Susan E. Hankinson, and Immaculata De Vivo. “Perineal Use of Talcum Powder and Endometrial Cancer Risk.” *Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 19, no. 5 (May 2010): 1269–75.
  168. Kasper, C. S., and P. J. Chandler. “Possible Morbidity in Women from Talc on Condoms.” *JAMA: The Journal of the American Medical Association* 273, no. 11 (March 15, 1995): 846–47.
  169. Kauff, Noah D., Nandita Mitra, Mark E. Robson, Karen E. Hurley, Shaokun Chuai, Deborah Goldfrank, Eve Wadsworth, et al. “Risk of Ovarian Cancer in BRCA1 and BRCA2 Mutation-Negative Hereditary Breast Cancer Families.” *Journal of the National Cancer Institute* 97, no. 18 (September 21, 2005): 1382–84. <https://doi.org/10.1093/jnci/dji281>.
  170. Keal, E. E. “Asbestosis and Abdominal Neoplasms.” *Lancet* 2, no. 7162 (December 3, 1960): 1211–16.
  171. Keskin, Nadi, Yasemin Aktan Teksen, Esra Gürlek Ongun, Yusuf Ozay, and Halil Saygili. “Does Long-Term Talc Exposure Have a Carcinogenic Effect on the Female Genital System of Rats? An Experimental Pilot Study.” *Archives of Gynecology and Obstetrics* 280, no. 6 (December 2009): 925–31. <https://doi.org/10.1007/s00404-009-1030-3>.
  172. Khan, Mohd Imran, Amogh A. Sahasrabuddhe, Govil Patil, Mohd Javed Akhtar, Mohd Ashquin, and Iqbal Ahmad. “Nano-Talc Stabilizes TNF-Alpha m-RNA in Human Macrophages.” *Biomedical Nanotechnology* 7, no. 1 (2011): 112–13.
  173. Kiraly, Orsolya, Guanyu Gong, Werner Olipitz, Sureshkumar Muthupalani, and Bevin P. Engelward. “Inflammation-Induced Cell Proliferation Potentiates DNA Damage-Induced Mutations In Vivo.” *PLoS Genetics*, February 3, 2015.
  174. Kissler, Stefan, Ernst Siebzehnuebl, Joachim Kohl, Anja Mueller, Nadja Hamscho, Regine Gaetje, Andre Ahr, Achim Rody, and Manfred Kaufmann. “Uterine Contractility and Directed Sperm Transport Assessed by Hysterosalpingoscintigraphy (HSSG) and Intrauterine Pressure (IUP) Measurement.” *Acta Obstetrica Et Gynecologica Scandinavica* 83, no. 4 (April 2004): 369–74.
  175. Kunz, Beil. “The Uterine Peristaltic Pump: Normal and Impeded Sperm Transport within the Female Genital Tract.” *Adv Exp Med Biol* 424 (1997): 267–77.
  176. Kurman, Robert J., and Ie-Ming Shih. “The Origin and Pathogenesis of Epithelial Ovarian Cancer: A Proposed Unifying Theory.” *The American Journal of Surgical Pathology* 34, no. 3 (March 2010): 433–43. <https://doi.org/10.1097/PAS.0b013e3181cf3d79>.
  177. Kurta, Michelle L., Kirsten B. Moysich, Joel L. Weissfeld, Ada O. Youk, Clareann H. Bunker, Robert P. Edwards, Francesmary Modugno, Roberta B. Ness, and Brenda Diergaarde. “Use of Fertility Drugs and Risk of Ovarian Cancer: Results from a US-Based Case-Control Study.” *Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21, no. 8 (August 2012): 1282–92. <https://doi.org/10.1158/1055-9965.EPI-12-0426>.
  178. Lancaster, Johnathan M., C. Bethan Powell, Lee-may Chen, and Debra L. Richardson. “Society of Gynecologic Oncology Statement on Risk Assessment for Inherited Gynecologic Cancer Predispositions.” *Gynecologic Oncology* 136, no. 1 (January 2015): 3–7.

179. Landen, Charles N., Michael J. Birrer, and Anil K. Sood. "Early Events in the Pathogenesis of Epithelial Ovarian Cancer." *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 26, no. 6 (February 20, 2008): 995–1005.
180. Langseth, H., S. E. Hankinson, J. Siemiatycki, and E. Weiderpass. "Perineal Use of Talc and Risk of Ovarian Cancer." *Journal of Epidemiology and Community Health* 62, no. 4 (April 2008): 358–60. <https://doi.org/10.1136/jech.2006.047894>.
181. Langseth, H., B. V. Johansen, J. M. Nesland, and K. Kjaerheim. "Asbestos Fibers in Ovarian Tissue from Norwegian Pulp and Paper Workers." *International Journal of Gynecological Cancer: Official Journal of the International Gynecological Cancer Society* 17, no. 1 (February 2007): 44–49. <https://doi.org/10.1111/j.1525-1438.2006.00768.x>.
182. Langseth, Hilde, and Kristina Kjaerheim. "Ovarian Cancer and Occupational Exposure among Pulp and Paper Employees in Norway." *Scandinavian Journal of Work, Environment & Health* 30, no. 5 (October 2004): 356–61.
183. Lanphear, B. P., and C. R. Buncher. "Latent Period for Malignant Mesothelioma of Occupational Origin." *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association* 34, no. 7 (July 1992): 718–21.
184. Lee, Jennifer S., Esther M. John, Valerie McGuire, Anna Felberg, Kimberly L. Ostrow, Richard A. DiCioccio, Frederick P. Li, Alexander Miron, Dee W. West, and Alice S. Whittemore. "Breast and Ovarian Cancer in Relatives of Cancer Patients, with and without BRCA Mutations." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 15, no. 2 (February 2006): 359–63. <https://doi.org/10.1158/1055-9965.EPI-05-0687>.
185. Levanon, Keren, Christopher Crum, and Ronny Drapkin. 2008. "New Insights Into the Pathogenesis of Serous Ovarian Cancer and Its Clinical Impact." *Journal of Clinical Oncology* 26 (32): 5284–93. <https://doi.org/10.1200/JCO.2008.18.1107>.
186. Levy-Lahad, E., and E. Friedman. "Cancer Risks among BRCA1 and BRCA2 Mutation Carriers." *British Journal of Cancer* 96, no. 1 (January 15, 2007): 11–15.
187. Lin, Hui-Wen, Ying-Yueh Tu, Shiyng Yu Lin, Wei-Ju Su, Wei Li Lin, Wei Zer Lin, Shen-Chi Wu, and Yuen-Liang Lai. "Risk of Ovarian Cancer in Women with Pelvic Inflammatory Disease: A Population-Based Study." *The Lancet. Oncology* 12, no. 9 (September 2011): 900–904.
188. Liou, Geou-Yarh, and Peter Storz. "Reactive Oxygen Species in Cancer." *Free Radical Research* 44, no. 5 (May 2010): 476–96. <https://doi.org/10.3109/10715761003667554>.
189. Liu, D. T., and A. Hitchcock. "Endometriosis: Its Association with Retrograde Menstruation, Dysmenorrhoea and Tubal Pathology." *British Journal of Obstetrics and Gynaecology* 93, no. 8 (August 1986): 859–62.
190. Lo-Ciganic, Wei-Hsuan, Janice C. Zgibor, Clareann H. Bunker, Kirsten B. Moysich, Robert P. Edwards, and Roberta B. Ness. "Aspirin, Nonaspirin Nonsteroidal Anti-Inflammatory Drugs, or Acetaminophen and Risk of Ovarian Cancer." *Epidemiology (Cambridge, Mass.)* 23, no. 2 (March 2012): 311–19.
191. Lockey, J. E. "Nonasbestos Fibrous Minerals." *Clinics in Chest Medicine* 2, no. 2 (May 1981): 203–18.
192. Longo, D. L., and R. C. Young. "Cosmetic Talc and Ovarian Cancer." *Lancet* 2, no. 8138 (August 18, 1979): 349–51.
193. Longo, William E., and Mark W. Rigler. "The Analysis of Johnson & Johnson's Historical Baby Powder & Shower to Shower Products from the 1960's to the Early 1990's for Amphibole Asbestos," November 14, 2018.

194. Lu, Haitian. "Inflammation, a Key Event in Cancer Development," 2006, 221–33.
195. Madsen, Cecilie, Louise Baandrup, Christian Dehlendorff, and Susanne K. Kjaer. "Tubal Ligation and Salpingectomy and the Risk of Epithelial Ovarian Cancer and Borderline Ovarian Tumors: A Nationwide Case-Control Study." *Acta Obstetrica Et Gynecologica Scandinavica* 94, no. 1 (January 2015): 86–94.
196. Magnani, C., D. Ferrante, F. Barone-Adesi, M. Bertolotti, A. Todesco, D. Mirabelli, and B. Terracini. "Cancer Risk after Cessation of Asbestos Exposure: A Cohort Study of Italian Asbestos Cement Workers." *Occupational and Environmental Medicine* 65, no. 3 (March 2008): 164–70.
197. Maharaj-Gentry, Aleksandra, Michelle Griffin and Usha Menon. *Cancer Prevention and Screening: Concepts, Principles and Controversies*. In Rosalind A. Eeles, Christine D. Berg, and Jeffery S. Tobias (Eds.). 1st ed. Chapter 23. Accessed August 21, 2018.
198. Mallen, Adrienne R., Mary K. Townsend, and Shelley S. Tworoger. "Risk Factors for Ovarian Carcinoma." *Hematology/Oncology Clinics of North America*, September 2018.
199. Marie Mc Cullough. "Condom Makers Stop Using Talc." *Asbury Park Press*. January 16, 1996.
200. Mattenklott, M. "Asbestos in Talc Powders and in Soapstone - The Present State." *Staub, Reinhaltung Der Luft* 67 (July 1, 2007): 287–92.
201. McCullough, Marie. "Women's Health Concerns Prompt Condom Makers to Stop Using Talc." *Jersey Journal*. April 17, 1996, City Edition edition.
202. McLaughlin-Drubin, Margaret E., and Karl Munger. "Viruses Associated with Human Cancer." *Biochimica et Biophysica Acta* 1782, no. 3 (March 2008): 127–50.
203. McLemore, Miaskowski, Chen Aouizerat, and Dodd. "Epidemiological and Genetic Factors Associated With Ovarian Cancer." *Cancer Nursing* 32, no. 4 (2009): 281–88.
204. Melaiu, Ombretta, Federica Gemignani, and Stefano Landi. "The Genetic Susceptibility in the Development of Malignant Pleural Mesothelioma." *Journal of Thoracic Disease* 10, no. Suppl 2 (January 2018): S246–52.
205. Meng, Qingsong, Weixue Sun, John Jiang, Nicole M. Fletcher, Michael P. Diamond, and Ghassan M. Saed. "Identification of Common Mechanisms between Endometriosis and Ovarian Cancer." *Journal of Assisted Reproduction and Genetics* 28 (2011): 917–23.
206. Merritt, Melissa A., Adèle C. Green, Christina M. Nagle, Penelope M. Webb, Australian Cancer Study (Ovarian Cancer), and Australian Ovarian Cancer Study Group. "Talcum Powder, Chronic Pelvic Inflammation and NSAIDs in Relation to Risk of Epithelial Ovarian Cancer." *International Journal of Cancer. Journal International Du Cancer* 122, no. 1 (January 1, 2008): 170–76.
207. Miller, Diane M, and Jessica N. McAlpine. "Opportunistic Salpingectomy for Ovarian, Fallopian Tubal, and Peritoneal Carcinoma Risk Reduction." *UpToDate*, 2018.
208. Mills, Paul K., Deborah G. Riordan, Rosemary D. Cress, and Heather A. Young. "Perineal Talc Exposure and Epithelial Ovarian Cancer Risk in the Central Valley of California." *International Journal of Cancer. Journal International Du Cancer* 112, no. 3 (November 10, 2004): 458–64.
209. Milne, Roger L., and Antonis C. Antoniou. "Modifiers of Breast and Ovarian Cancer Risks for BRCA1 and BRCA2 Mutation Carriers." *Endocrine-Related Cancer* 23, no. 10 (2016): T69-84.
210. Moller, Danielsen, and Roursgaard Jantzen. "Oxidatively Damaged DNA in Animals Exposed to Particles." *Critical Reviews in Toxicology* 43, no. 2 (2013): 96–118.
211. Moon, Min Chaul, Jung Duck Park, Byung Soon Choi, So Young Park, Dong Won Kim, Yong Hyun Chung, Naomi Hisanaga, and Il Je Yu. "Risk Assessment of Baby Powder Exposure through Inhalation." *Toxicological Research* 27, no. 3 (September 2011): 137–41.

212. Moorman, Patricia G., Rachel T. Palmieri, Lucy Akushevich, Andrew Berchuck, and Joellen M. Schildkraut. "Ovarian Cancer Risk Factors in African-American and White Women." *American Journal of Epidemiology* 170, no. 5 (September 1, 2009): 598–606.
213. Mostafa, S. A., C. B. Barger, R. W. Flower, N. B. Rosenshein, T. H. Parmley, and J. D. Woodruff. "Foreign Body Granulomas in Normal Ovaries." *Obstetrics and Gynecology* 66, no. 5 (November 1985): 701–2.
214. Murphy, Megan A., Britton Trabert, Hannah P. Yang, Yikyung Park, Louise A. Brinton, Patricia Hartge, Mark E. Sherman, Albert Hollenbeck, and Nicolas Wentzensen. "Non-Steroidal Anti-Inflammatory Drug Use and Ovarian Cancer Risk: Findings from the NIH-AARP Diet and Health Study and Systematic Review." *Cancer Causes & Control: CCC* 23, no. 11 (November 2012): 1839–52.
215. Muscat, J. E., and M. S. Huncharek. "Causation and Disease: Biomedical Science in Toxic Tort Litigation." *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association* 31, no. 12 (December 1989): 997–1002.
216. Nadler, Diana L., and Igor G. Zurbenko. "Estimating Cancer Latency Times Using a Weibull Model," 2014, 8.
217. Narod, Steven A. "Talc and Ovarian Cancer." *Gynecologic Oncology* 141, no. 3 (2016): 410–12.
218. National Cancer Institute, Surveillance, Epidemiology, and End Results Program. "Cancer Stat Facts: Ovarian Cancer," 2018.
219. National Center for Health Research. "Does Talcum Powder Cause Ovarian Cancer?" *The Voice: For Prevention, Treatment, and Policy*, Spring/Summer 2018, 32 edition.
220. National Center for Health Research. "Talcum Powder and Ovarian Cancer." *National Center for Health Research* (blog), April 13, 2018. <http://www.center4research.org/talcum-powder-ovarian-cancer/>.
221. Nelson, Heather H., and Karl T. Kelsey. "The Molecular Epidemiology of Asbestos and Tobacco in Lung Cancer." *Oncogene* 21, no. 48 (October 21, 2002): 7284–88.
222. Ness, R. B., and C. Cottréau. "Possible Role of Ovarian Epithelial Inflammation in Ovarian Cancer." *Journal of the National Cancer Institute* 91, no. 17 (September 1, 1999): 1459–67.
223. Ness, R. B., J. A. Grisso, C. Cottréau, J. Klapper, R. Vergona, J. E. Wheeler, M. Morgan, and J. J. Schlesselman. "Factors Related to Inflammation of the Ovarian Epithelium and Risk of Ovarian Cancer." *Epidemiology (Cambridge, Mass.)* 11, no. 2 (March 2000): 111–17.
224. Newhouse, M L, Berry, G., and J. C. Wagner. "Mortality of Factory Workers in East London 1933-80." *British Journal of Industrial Medicine* 42, no. 1 (January 1985): 4–11.
225. Newhouse, M. L., G. Berry, J. C. Wagner, and M. E. Turok. "A Study of the Mortality of Female Asbestos Workers." *British Journal of Industrial Medicine* 29, no. 2 (April 1972): 134–41.
226. NIOSH. "CDC – Occupational Cancer – Carcinogen List – NIOSH Safety and Health Topic," April 24, 2017. <https://www.cdc.gov/niosh/topics/cancer/npotocca.html>.
227. NIOSH. "DHHS (NIOSH) Publication No. 86-102," September 1981.
228. NIOSH. "Fiber Exposure during Use of Baby Powders, Report No. IWS-36-6.," July 1972.
229. NIOSH 2011 Current Intelligence Bulletin No. 62, 2011. N
230. NIOSHTIC-2 Publications Search - 00106056 - Fiber Exposure during Use of Baby Powders, Report No. IWS-36-6. Accessed August 16, 2018. <https://www.cdc.gov/niosh/nioshtic-2/00106056.html>.
231. NIOSHTIC-2 Publications Search - 00106056 – Fiber.

232. Norquist, Barbara M., Maria I. Harrell, Mark F. Brady, Tom Walsh, Ming K. Lee, Suleyman Gulsuner, Sarah S. Bernards, et al. "Inherited Mutations in Women With Ovarian Carcinoma." *JAMA Oncology* 2, no. 4 (April 2016): 482–90.
233. NTP. "NTP Technical Report on the Toxicology and Carcinogenesis Studies of Benzophenone (CAS No. 119-61-9) In F344/N Rats and B6C3F1 Mice," February 2006.
234. "NTP Toxicology and Carcinogenesis Studies of Talc (CAS No. 14807-96-6)(NonAsbestiform) in F344/N.Rats and B6C3F1 Mice (Inhalation Studies)," 1993.
235. Nutrition, Center for Food Safety and Applied. "Potential Contaminants - FDA's Testing of Cosmetics for Arsenic, Cadmium, Chromium, Cobalt, Lead, Mercury, and Nickel Content." WebContent. Accessed August 16, 2018.
236. Okada, Futoshi. "Beyond Foreign-Body-Induced Carcinogenesis: Impact of Reactive Oxygen Species Derived from Inflammatory Cells in Tumorigenic Conversion and Tumor Progression." *International Journal of Cancer* 121, no. 11 (December 1, 2007): 2364–72.
237. "OSHA Factsheet: Asbestos," 2014. <https://www.osha.gov/SLTC/asbestos/>.
238. Paoletti, L., S. Caiazza, G. Donelli, and F. Pocchiari. "Evaluation by Electron Microscopy Techniques of Asbestos Contamination in Industrial, Cosmetic, and Pharmaceutical Talcs." *Regulatory Toxicology and Pharmacology: RTP* 4, no. 3 (September 1984): 222–35.
239. Parmley, T. H., and J. D. Woodruff. "The Ovarian Mesothelioma." *American Journal of Obstetrics and Gynecology* 120, no. 2 (September 15, 1974): 234–41.
240. *Pathology of Asbestos-Associated Diseases*. Accessed October 14, 2014.
241. Pearce, Celeste Leigh, Claire Templeman, Mary Anne Rossing, Alice Lee, Aimee M Near, Penelope M Webb, Christina M Nagle, et al. "Association between Endometriosis and Risk of Histological Subtypes of Ovarian Cancer: A Pooled Analysis of Case–Control Studies." *The Lancet Oncology* 13, no. 4 (April 2012): 385–94.
242. Pejovic, Tanja, and Farr Nezhat. "Missing Link: Inflammation and Ovarian Cancer." *The Lancet Oncology* 12, no. 9 (September 2011): 833–34. [https://doi.org/10.1016/S1470-2045\(11\)70203-0](https://doi.org/10.1016/S1470-2045(11)70203-0).
243. Penninkilampi, Ross, and Guy D. Eslick. "Perineal Talc Use and Ovarian Cancer: A Systematic Review and Meta-Analysis." *Epidemiology (Cambridge, Mass.)* 29, no. 1 (January 2018): 41–49.
244. Peres, Lauren C., et al. "Analgesic Medication Use and Risk of Epithelial Ovarian Cancer in African American Women." *British Journal of Cancer* no. 114 (2016): 819-25.
245. Peshkin, B., and et al. "Genetic Counseling and Testing for Hereditary Breast and Ovarian Cancer - UpToDate," 2018..
246. Peshkin. "Overview of Hereditary Breast and Ovarian Cancer Syndromes - UpToDate," 2018.
247. Peshkin. "Prevalence of BRCA1 and BRCA2 Mutations and Associated Cancer Risks - UpToDate," 2018.
248. Phillips, J. C., P. J. Young, K. Hardy, and S. D. Gangolli. "Studies on the Absorption and Disposition of 3H-Labelled Talc in the Rat, Mouse, Guinea-Pig and Rabbit." *Food and Cosmetics Toxicology* 16, no. 2 (April 1978): 161–63.
249. Pike, Malcom C., et al. "Hormonal Factors and the Risk of Invasive Ovarian Cancer: a Population-Based Case-Control Study." *Fertility and Sterility* vol. 82, no. 1 (2004): 186-195.
250. Pira, E., C. Pelucchi, L. Buffoni, A. Palmas, M. Turbiglio, E. Negri, P. G. Piolatto, and C. La Vecchia. "Cancer Mortality in a Cohort of Asbestos Textile Workers." *British Journal of Cancer* 92, no. 3 (February 14, 2005): 580–86. <https://doi.org/10.1038/sj.bjc.6602240>.
251. Pira, Enrico, Canzio Romano, Francesco S. Violante, Andrea Farioli, Giovanna Spatari, Carlo La Vecchia, and Paolo Boffetta. "Updated Mortality Study of a Cohort of Asbestos Textile Workers." *Cancer Medicine* 5, no. 9 (2016): 2623–28. <https://doi.org/10.1002/cam4.824>.

252. Porro, F. W., and N. M. Levine. "Pathology of Talc Pneumoconiosis with Report of an Autopsy." *Northern New York Medical Journal* 3 (April 1946): 23–25.
253. *Product: \*2017 TLVs and BEIs: ACGIH*. Accessed August 16, 2018.
254. *Product: Asbestos: TLV(R) Chemical Substances 7th Edition Documentation: ACGIH*. Accessed August 16, 2018.
255. Psooy, Karen and Jason P. Archambault. "Vaginal Entrapment of Bathwater: A Source of Extra-Urethral Incontinence." *Can Urol Assoc J* Vol. 4, no. 5 (2010): E123-26.
256. Pukkala, Eero, Jan Ivar Martinsen, Elsebeth Lynge, Holmfridur Kolbrun Gunnarsdottir, Pär Sparén, Laufey Tryggvadottir, Elisabete Weiderpass, and Kristina Kjaerheim. "Occupation and Cancer - Follow-up of 15 Million People in Five Nordic Countries." *Acta Oncologica (Stockholm, Sweden)* 48, no. 5 (2009): 646–790. <https://doi.org/10.1080/02841860902913546>.
257. Purdie, D., A. Green, C. Bain, V. Siskind, B. Ward, N. Hacker, M. Quinn, G. Wright, P. Russell, and B. Susil. "Reproductive and Other Factors and Risk of Epithelial Ovarian Cancer: An Australian Case-Control Study. Survey of Women's Health Study Group." *International Journal of Cancer. Journal International Du Cancer* 62, no. 6 (September 15, 1995): 678–84.
258. Purdie, David M., Christopher J. Bain, Victor Siskind, Penelope M. Webb, and Adèle C. Green. "Ovulation and Risk of Epithelial Ovarian Cancer." *International Journal of Cancer. Journal International Du Cancer* 104, no. 2 (March 20, 2003): 228–32. <https://doi.org/10.1002/ijc.10927>.
259. Radic, I, I Vucak, J Milosevic, A Marusic, S Vukicevic, and M Marusic. "Immunosuppression Induced by Talc Granulomatosis in the Rat." *Clinical and Experimental Immunology* 73, no. 2 (August 1988): 316–21.
260. Ramus, Susan J., Antonis C. Antoniou, Karoline B. Kuchenbaecker, Penny Soucy, Jonathan Beesley, Xiaoqing Chen, Lesley McGuffog, et al. "Ovarian Cancer Susceptibility Alleles and Risk of Ovarian Cancer in BRCA1 and BRCA2 Mutation Carriers." *Human Mutation* 33, no. 4 (April 2012): 690–702.
261. Rasmussen, C. B., et al. "Pelvic Inflammatory Disease and the Risk of Ovarian Cancer and Borderline Ovarian Tumors: A Pooled Analysis of 13 Case-Control Studies." *Am J Epidemiol.* 185, no. 1 (2017): 8-20.
262. Rebbeck, Timothy R., Nandita Mitra, Fei Wan, Olga M. Sinilnikova, Sue Healey, Lesley McGuffog, Sylvie Mazoyer, et al. "Association of Type and Location of BRCA1 and BRCA2 Mutations with Risk of Breast and Ovarian Cancer." *JAMA* 313, no. 13 (April 7, 2015): 1347–61.
263. "Reference Manual on Scientific Evidence" Third Edition (2011).
264. REHMAN, GHANA, IFTIKHAR HUSSAIN BUKHARI, MUHAMMAD RIAZ, NASIR RASOOL, UZMA SATTAR, and HAFIZA SUMAIRA MANZOOR. "DETERMINATION OF TOXIC HEAVY METALS IN DIFFERENT BRANDS OF TALCUM POWDER." *International Journal of Applied and Natural Sciences (IJANS)* 2, no. 2 (May 2013): 8.
265. Reid, A., J. Heyworth, N. de Klerk, and A. W. Musk. "The Mortality of Women Exposed Environmentally and Domestically to Blue Asbestos at Wittenoom, Western Australia." *Occupational and Environmental Medicine* 65, no. 11 (November 2008): 743–49.
266. Reid, A., N. H. de Klerk, C. Magnani, D. Ferrante, G. Berry, A. W. Musk, and E. Merler. "Mesothelioma Risk after 40 Years since First Exposure to Asbestos: A Pooled Analysis." *Thorax* 69, no. 9 (September 2014): 843–50. <https://doi.org/10.1136/thoraxjnl-2013-204161>.
267. Reid, Alison, Nick de Klerk, and Arthur W. (Bill) Musk. "Does Exposure to Asbestos Cause Ovarian Cancer? A Systematic Literature Review and Meta-Analysis." *Cancer Epidemiology Biomarkers & Prevention* 20, no. 7 (July 1, 2011): 1287–95.

268. Reid, Alison, Amanda Segal, Jane S. Heyworth, Nicholas H. de Klerk, and Arthur W. Musk. "Gynecologic and Breast Cancers in Women after Exposure to Blue Asbestos at Wittenoom." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 18, no. 1 (January 2009): 140–47. <https://doi.org/10.1158/1055-9965.EPI-08-0746>.
269. Reid, Brett M., Jennifer B. Permuth, and Thomas A. Sellers. "Epidemiology of Ovarian Cancer: A Review." *Cancer Biology & Medicine* 14, no. 1 (February 2017): 9–32.
270. Reuter, Simone, Subash C. Gupta, Madan M. Chaturvedi, and Bharat B. Aggarwal. "Oxidative Stress, Inflammation, and Cancer: How Are They Linked?" *Free Radical Biology and Medicine* 49, no. 11 (December 1, 2010): 1603–16.
271. "Revised Draft NIOSH CURRENT INTELLIGENCE BULLETIN Asbestos Fibers and Other Elongated Mineral Particles: State of the Science and Roadmap for Research," January 2009.
272. Rice, Megan S., Susan E. Hankinson, and Shelley S. Tworoger. "Tubal Ligation, Hysterectomy, Unilateral Oophorectomy, and Risk of Ovarian Cancer in the Nurses' Health Studies." *Fertility and Sterility* 102, no. 1 (July 2014): 192-198.e3.
273. Ring, Kari L., Christine Garcia, Martha H. Thomas, and Susan C. Modesitt. "Current and Future Role of Genetic Screening in Gynecologic Malignancies." *American Journal of Obstetrics and Gynecology* 217, no. 5 (2017): 512–21. <https://doi.org/10.1016/j.ajog.2017.04.011>.
274. Riska, A., J. I. Martinsen, K. Kjaerheim, E. Lynge, P. Sparen, L. Tryggvadottir, E. Weiderpass, and E. Pukkala. "Occupation and Risk of Primary Fallopian Tube Carcinoma in Nordic Countries." *International Journal of Cancer* 131, no. 1 (July 1, 2012): 186–92.
275. Rohl, A. N. "Asbestos in Talc." *Environmental Health Perspectives* 9 (December 1974): 129–32.
276. Rohl, A. N., A. M. Langer, I. J. Selikoff, A. Tordini, R. Klimentidis, D. R. Bowes, and D. L. Skinner. "Consumer Talcums and Powders: Mineral and Chemical Characterization." *Journal of Toxicology and Environmental Health* 2, no. 2 (November 1976): 255–84.
277. Roodhouse Gloyne, S. "Two Cases of Squamous Carcinoma of the Lung Occurring in Asbestosis." *Tubercle* 17, no. 1 (October 1, 1935): 5-IN2. [https://doi.org/10.1016/S0041-3879\(35\)80795-2](https://doi.org/10.1016/S0041-3879(35)80795-2).
278. Rosenblatt, K. A., M. Szklo, and N. B. Rosenshein. "Mineral Fiber Exposure and the Development of Ovarian Cancer." *Gynecologic Oncology* 45, no. 1 (April 1992): 20–25.
279. Rosenblatt, Karin A., Noel S. Weiss, Kara L. Cushing-Haugen, Kristine G. Wicklund, and Mary Anne Rossing. "Genital Powder Exposure and the Risk of Epithelial Ovarian Cancer." *Cancer Causes & Control: CCC* 22, no. 5 (May 2011): 737–42.
280. Rösler, J. A., H. J. Woitowitz, H. J. Lange, R. H. Woitowitz, K. Ulm, and K. Rödelserperger. "Mortality Rates in a Female Cohort Following Asbestos Exposure in Germany." *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association* 36, no. 8 (August 1994): 889–93.
281. Ross, M. "Geology, Asbestos, and Health." *Environmental Health Perspectives* 9 (December 1974): 123–24.
282. Rothman, Kenneth J., Sander Greenland, and Timothy L. Lash. *Modern Epidemiology*. Lippincott Williams & Wilkins, 2008.
283. Rothman, Kenneth J. "Six Persistent Research Misconceptions." *J Gen Intern Med* 29, no. 7 (2014):1060-4.
284. Saed, Ghassan M., Rouba Ali-Fehmi, Zhong L. Jiang, Nicole M. Fletcher, Michael P. Diamond, Husam M. Abu-Soud, and Adnan R. Munkarah. "Myeloperoxidase Serves as a Redox Switch That

- Regulates Apoptosis in Epithelial Ovarian Cancer.” *Gynecologic Oncology* 116, no. 2 (February 2010): 276–81. <https://doi.org/10.1016/j.ygyno.2009.11.004>.
285. Saed, Ghassan M., Michael P. Diamond, and Nicole M. Fletcher. “Updates of the Role of Oxidative Stress in the Pathogenesis of Ovarian Cancer.” *Gynecologic Oncology* 145, no. 3 (June 2017): 595–602. <https://doi.org/10.1016/j.ygyno.2017.02.033>.
286. Saed, Ghassan M., Nicole M. Fletcher, Michael P. Diamond, Robert T. Morris, Nardhy Gomez-Lopez, and Ira Memaj. “Novel Expression of CD11b in Epithelial Ovarian Cancer: Potential Therapeutic Target.” *Gynecologic Oncology* 148, no. 3 (2018): 567–75.
287. Saed, Ghassan M., Robert T. Morris, and Nicole M. Fletcher. *New Insights into the Pathogenesis of Ovarian Cancer: Oxidative Stress*, 2018.
288. Schildkraut, Joellen M., Sarah E. Abbott, Anthony J. Alberg, Elisa V. Bandera, Jill S. Barnholtz-Sloan, Melissa L. Bondy, Michele L. Cote, et al. “Association between Body Powder Use and Ovarian Cancer: The African American Cancer Epidemiology Study (AACES).” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 25, no. 10 (2016): 1411–17. <https://doi.org/10.1158/1055-9965.EPI-15-1281>.
289. Seeler, Albert O. “Toxic Hazards: Talc Pneumoconiosis.” *New England Journal of Medicine* 261, no. 21 (November 19, 1959): 1084–85. <https://doi.org/10.1056/NEJM195911192612115>.
290. SEER Cancer Statistics Review, 1975-2015, National Cancer Institute, Bethesda, MD, Based on November 2017 SEER Data Submission, Posted to the SEER Web Site, April 2018.
291. Selikoff, I. J., J. Churg, and E. C. Hammond. “Asbestos Exposure and Neoplasia.” *JAMA* 188 (April 6, 1964): 22–26.
292. Shan, Weiwei, and Jinsong Liu. “Inflammation: A Hidden Path to Breaking the Spell of Ovarian Cancer.” *Cell Cycle* 8, no. 19 (2009): 3107–11. <https://doi.org/10.4161/cc.8.19.9590>.
293. Shukla, Arti, Maximilian B. MacPherson, Jedd Hillegass, Maria E. Ramos-Nino, Vlada Alexeeva, Pamela M. Vacek, Jeffrey P. Bond, Harvey I. Pass, Chad Steele, and Brooke T. Mossman. “Alterations in Gene Expression in Human Mesothelial Cells Correlate with Mineral Pathogenicity.” *American Journal of Respiratory Cell and Molecular Biology* 41, no. 1 (July 2009): 114–23. <https://doi.org/10.1165/rcmb.2008-0146OC>.
294. Shushan, A., O. Paltiel, J. Iscovich, U. Elchalal, T. Peretz, and J. G. Schenker. “Human Menopausal Gonadotropin and the Risk of Epithelial Ovarian Cancer.” *Fertility and Sterility* 65, no. 1 (January 1996): 13–18.
295. Sjösten, A. C. E., H. Ellis, and G. a. B. Edelstam. “Retrograde Migration of Glove Powder in the Human Female Genital Tract.” *Human Reproduction* 19, no. 4 (April 1, 2004): 991–95.
296. Stanton, M. F., M. Layard, A. Tegeris, E. Miller, M. May, E. Morgan, and A. Smith. “Relation of Particle Dimension to Carcinogenicity in Amphibole Asbestos and Other Fibrous Minerals.” *Journal of the National Cancer Institute* 67, no. 5 (November 1981): 965–75.
297. Steiling, W., M. Bascompta, P. Carthew, G. Catalano, N. Corea, A. D’Haese, P. Jackson, et al. “Principle Considerations for the Risk Assessment of Sprayed Consumer Products.” *Toxicology Letters* 227, no. 1 (May 16, 2014): 41–49.
298. Stewart, Louise M., C. D’Arcy J. Holman, Patrick Aboagye-Sarfo, Judith C. Finn, David B. Preen, and Roger Hart. “In Vitro Fertilization, Endometriosis, Nulliparity and Ovarian Cancer Risk.” *Gynecologic Oncology* 128, no. 2 (February 2013): 260–64.
299. Stewart, Louise M., Katrina Spilsbury, Susan Jordan, Colin Stewart, C. D’Arcy J. Holman, Aime Powell, Joanne Reekie, and Paul Cohen. “Risk of High-Grade Serous Ovarian Cancer Associated

- with Pelvic Inflammatory Disease, Parity and Breast Cancer.” *Cancer Epidemiology* 55 (August 2018): 110–16.
300. Straif, Kurt. “Update of the Scientific Evidence on Asbestos and Cancer.” presented at the International Conference on Environmental and Occupational Determinants of Cancer: Interventions for Primary Prevention, Asturias (Avilés, Gijón), Spain, March 17, 2011.
  301. Taher, M. K., et al. “Critical Review of the Association Between Perineal Use of Talc Powder and Risk of Ovarian Cancer.” *Reproductive Toxicology* 90 (2019): 88-101.
  302. “Talc.” IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans 42 (1987): 185–224.
  303. Tarchi, M., D. Orsi, P. Comba, M. De Santis, R. Pirastu, G. Battista, and M. Valiani. “Cohort Mortality Study of Rock Salt Workers in Italy.” *American Journal of Industrial Medicine* 25, no. 2 (February 1994): 251–56.
  304. Taskin, Salih, et al. “Malignant Peritoneal Mesothelioma Presented as Peritoneal Adenocarcinoma or Primary Ovarian Cancer: Case Series and Review of the Clinical and Immunohistochemical Features.” *Int J Clin Exp Pathol* 5, no. 5 (2012): 472-78.
  305. Terry, Kathryn L., Stalo Karageorgi, Yurii B. Shvetsov, Melissa A. Merritt, Galina Lurie, Pamela J. Thompson, Michael E. Carney, et al. “Genital Powder Use and Risk of Ovarian Cancer: A Pooled Analysis of 8,525 Cases and 9,859 Controls.” *Cancer Prevention Research (Philadelphia, Pa.)* 6, no. 8 (August 2013): 811–21. <https://doi.org/10.1158/1940-6207.CAPR-13-0037>.
  306. Thomas, Charles A., and Major G. Seelig. Powder lubricated surgeon’s rubber glove. United States US2621333A, filed June 27, 1947, and issued December 16, 1952.
  307. Torre, Lindsey A., Britton Trabert, Carol E. DeSantis, Kimberly D. Miller, Goli Samimi, Carolyn D. Runowicz, Mia M. Gaudet, Ahmedin Jemal, and Rebecca L. Siegel. “Ovarian Cancer Statistics, 2018.” *CA: A Cancer Journal for Clinicians* 68, no. 4 (July 2018): 284–96.
  308. Trabert, Britton, Elizabeth M. Poole, Emily White, Kala Visvanathan, Hans-Olov Adami, Garnet L. Anderson, Theodore M. Brasky, et al. “Analgesic Use and Ovarian Cancer Risk: An Analysis in the Ovarian Cancer Cohort Consortium.” *Journal of the National Cancer Institute* 111, no. 2 (2019).
  309. Trabert, Britton. “Body Powder and Ovarian Cancer Risk – What Is the Role of Recall Bias?” *Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 25, no. 10 (October 2016): 1369–70.
  310. Trabert, Britton, Ligia Pinto, Patricia Hartge, Troy Kemp, Amanda Black, Mark E. Sherman, Louise A. Brinton, et al. “Pre-Diagnostic Serum Levels of Inflammation Markers and Risk of Ovarian Cancer in the Prostate, Lung, Colorectal and Ovarian Cancer (PLCO) Screening Trial.” *Gynecologic Oncology* 135, no. 2 (November 2014): 297–304.
  311. Tsilidis, K K, N E Allen, T J Key, L Dossus, A Lukanova, K Bakken, E Lund, et al. “Oral Contraceptive Use and Reproductive Factors and Risk of Ovarian Cancer in the European Prospective Investigation into Cancer and Nutrition.” *British Journal of Cancer* 105, no. 9 (October 25, 2011): 1436–42.
  312. Tsilidis, Konstantinos K., Naomi E. Allen, Timothy J. Key, Laure Dossus, Rudolf Kaaks, Kjersti Bakken, Eiliv Lund, et al. “Menopausal Hormone Therapy and Risk of Ovarian Cancer in the European Prospective Investigation into Cancer and Nutrition.” *Cancer Causes & Control: CCC* 22, no. 8 (August 2011): 1075–84.
  313. Tworoger, Shelley S., Kathleen M. Fairfield, Graham A. Colditz, Bernard A. Rosner, and Susan

- E. Hankinson. "Association of Oral Contraceptive Use, Other Contraceptive Methods, and Infertility with Ovarian Cancer Risk." *American Journal of Epidemiology* 166, no. 8 (October 15, 2007): 894–901.
314. Tzonou, A., A. Polychronopoulou, C. C. Hsieh, A. Rebelakos, A. Karakatsani, and D. Trichopoulos. "Hair Dyes, Analgesics, Tranquilizers and Perineal Talc Application as Risk Factors for Ovarian Cancer." *International Journal of Cancer. Journal International Du Cancer* 55, no. 3 (September 30, 1993): 408–10.
315. US EPA National Center for Environmental Assessment, Immediate Office, and Reeder Sams. "IRIS Toxicological Review of Inorganic Arsenic (Cancer) (2010 External Review Draft)." Reports & Assessments, 1995. [https://cfpub.epa.gov/ncea/iris\\_drafts/recordisplay.cfm?deid=219111](https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=219111).
316. US EPA, ORD. "4-Methylphenol CASRN 106-44-5 | IRIS | US EPA, ORD," 1990.
317. Vallyathan, N. V., and J. E. Craighead. "Pulmonary Pathology in Workers Exposed to Nonasbestiform Talc." *Human Pathology* 12, no. 1 (January 1981): 28–35.
318. Van Gosen, B. S., H.A. Lowers, S.J. Sutley, and C.A. Gent. "Using the Geologic Setting of Talc Deposits as an Indicator of Amphibole Asbestos Content." *Environmental Geology* 45, no. 7 (2004): 20. <https://doi.org/10.1007/s00254-003-0955-2>.
319. Vanderhyden, Barbara C, Tanya J Shaw, and Jean-François Ethier. "Animal Models of Ovarian Cancer." *Reproductive Biology and Endocrinology : RB&E* 1 (October 7, 2003): 67.
320. Vasama-Neuvonen, K., E. Pukkala, H. Paakkulainen, P. Mutanen, E. Weiderpass, P. Boffetta, N. Shen, T. Kauppinen, H. Vainio, and T. Partanen. "Ovarian Cancer and Occupational Exposures in Finland." *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 83–89.
321. Venkatesan, Priya. "Possible X Chromosome-Linked Transmission of Ovarian Cancer." *The Lancet. Oncology* 19, no. 4 (April 2018): e185. [https://doi.org/10.1016/S1470-2045\(18\)30183-9](https://doi.org/10.1016/S1470-2045(18)30183-9).
322. Venter, P. F., and M. Iturralde. "Migration of a Particulate Radioactive Tracer from the Vagina to the Peritoneal Cavity and Ovaries." *South African Medical Journal = Suid-Afrikaanse Tydskrif Vir Geneeskunde* 55, no. 23 (June 2, 1979): 917–19.
323. Verdoodt, Freija, Christian Dehlendorff, Søren Friis, and Susanne K. Kjaer. "Non-Aspirin NSAID Use and Ovarian Cancer Mortality." *Gynecologic Oncology* 150, no. 2 (2018): 331–37.
324. Vicus, Danielle, Amy Finch, Barry Rosen, Isabel Fan, Linda Bradley, Ilana Cass, Ping Sun, et al. "Risk Factors for Carcinoma of the Fallopian Tube in Women with and without a Germline BRCA Mutation." *Gynecologic Oncology* 118, no. 2 (August 1, 2010): 155–59.
325. Vineis, Paolo, Phyllis Illari, and Federica Russo. "Causality in Cancer Research: A Journey through Models in Molecular Epidemiology and Their Philosophical Interpretation." *Emerging Themes in Epidemiology* 14, no. 7 (2017).
326. Virta, RL. "The Phase Relationship of Talc and Amphiboles in a Fibrous Talc Sample." IH; Report of Investigations, 1985. <https://www.cdc.gov/niosh/nioshtic-2/10004328.html>.
327. Vitonis, Allison F., Linda Titus-Ernstoff, and Daniel W. Cramer. "Assessing Ovarian Cancer Risk When Considering Elective Oophorectomy at the Time of Hysterectomy." *Obstetrics and Gynecology* 117, no. 5 (May 2011): 1042–50.
328. Vosnakis, Kelly, Elizabeth Perry, Karen Madsen, and Lisa Bradley. "Background Versus Risk-Based Screening Levels - An Examination Of Arsenic Background Soil Concentrations In Seven States." *Proceedings of the Annual International Conference on Soils, Sediments, Water and Energy* 14, no. 1 (January 26, 2010).
329. Wang, Xiaorong, Sihao Lin, Ignatius Yu, Hong Qiu, Yajia Lan, and Eiji Yano. "Cause-Specific Mortality in a Chinese Chrysotile Textile Worker Cohort." *Cancer Science* 104, no. 2 (February 2013): 245–49. <https://doi.org/10.1111/cas.12060>.

330. Wang, Chunpeng, Zhenzhen Liang, Xin Liu, Qian Zhang, and Shuang Li. "The Association between Endometriosis, Tubal Ligation, Hysterectomy and Epithelial Ovarian Cancer: Meta-Analyses." *International Journal of Environmental Research and Public Health* 13, no. 11 (November 14, 2016): 1138.
331. Wehner, A.P. "Biological Effects of Cosmetic Talc." *Fd Chem. Toxic* 32, no. 12 (1994): 1173-84.
332. Wehner, A. P., A. S. Hall, R. E. Weller, E. A. Lepel, and R. E. Schirmer. "Do Particles Translocate from the Vagina to the Oviducts and Beyond?" *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 23, no. 3 (March 1985): 367-72.
333. Wehner, A. P., R. E. Weller, and E. A. Lepel. "On Talc Translocation from the Vagina to the Oviducts and Beyond." *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 24, no. 4 (April 1986): 329-38.
334. Weiss, W. "Cigarette Smoking and Lung Cancer Trends. A Light at the End of the Tunnel?" *Chest* 111, no. 5 (May 1997): 1414-16.
335. Wentzensen, Nicolas, Elizabeth M. Poole, Britton Trabert, Emily White, Alan A. Arslan, Alpa V. Patel, V. Wendy Setiawan, et al. "Ovarian Cancer Risk Factors by Histologic Subtype: An Analysis From the Ovarian Cancer Cohort Consortium." *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 34, no. 24 (20 2016): 2888-98.
336. Werner, I. "Presence of Asbestos in Talc Samples." *Atenschutzinform* 21, no. 5 (1982).
337. Whiteman, David C., Michael F. G. Murphy, Linda S. Cook, Daniel W. Cramer, Patricia Hartge, Polly A. Marchbanks, Philip C. Nasca, Roberta B. Ness, David M. Purdie, and Harvey A. Risch. "Multiple Births and Risk of Epithelial Ovarian Cancer." *Journal of the National Cancer Institute* 92, no. 14 (July 19, 2000): 1172-77.
338. Whittemore, A. S., R. Harris, and J. Itnyre. "Characteristics Relating to Ovarian Cancer Risk: Collaborative Analysis of 12 US Case-Control Studies. IV. The Pathogenesis of Epithelial Ovarian Cancer. Collaborative Ovarian Cancer Group." *American Journal of Epidemiology* 136, no. 10 (November 15, 1992): 1212-20.
339. Whittemore, A. S., M. L. Wu, R. S. Paffenbarger, D. L. Sarles, J. B. Kampert, S. Grosser, D. L. Jung, S. Ballon, and M. Hendrickson. "Personal and Environmental Characteristics Related to Epithelial Ovarian Cancer. II. Exposures to Talcum Powder, Tobacco, Alcohol, and Coffee." *American Journal of Epidemiology* 128, no. 6 (December 1988): 1228-40.
340. Whysner, J., and M. Mohan. "Perineal Application of Talc and Cornstarch Powders: Evaluation of Ovarian Cancer Risk." *American Journal of Obstetrics and Gynecology* 182, no. 3 (March 2000): 720-24.
341. Wignall, B.K., and A.J. Fox. "Mortality of Female Gas Mask Assemblers." *British Journal of Industrial Medicine* 39, no. 1 (1982): 34-38.
342. Wild, P. "Lung Cancer Risk and Talc Not Containing Asbestiform Fibres: A Review of the Epidemiological Evidence." *Occupational and Environmental Medicine* 63, no. 1 (January 2006): 4-9. <https://doi.org/10.1136/oem.2005.020750>.
343. Wolff, Henrik, Tapio Vehmas, Panu Oksa, Jorma Rantanen, and Harri Vainio. "Asbestos, Asbestosis, and Cancer, the Helsinki Criteria for Diagnosis and Attribution 2014: Recommendations." *Scandinavian Journal of Work, Environment & Health* 41, no. 1 (January 2015): 5-15.
344. Wong, C., R. E. Hempling, M. S. Piver, N. Natarajan, and C. J. Mettlin. "Perineal Talc Exposure and Subsequent Epithelial Ovarian Cancer: A Case-Control Study." *Obstetrics and Gynecology* 93, no. 3 (March 1999): 372-76.

345. Woodruff, J. D. "The Pathogenesis of Ovarian Neoplasia." *The Johns Hopkins Medical Journal* 144, no. 4 (April 1979): 117–20.
346. Wright, H. R., J. C. Wheeler, J. A. Woods, J. Hesford, P. Taylor, and R. F. Edlich. "Potential Toxicity of Retrograde Uterine Passage of Particulate Matter." *Journal of Long-Term Effects of Medical Implants* 6, no. 3–4 (1996): 199–206.
347. Wright, Jason D. "What is New in Ovarian Cancer?" *Obstet Gynecol* 132 (2018): 1498–99.
348. Wu, Anna H., Celeste L. Pearce, Chiu-Chen Tseng, and Malcolm C. Pike. "African Americans and Hispanics Remain at Lower Risk of Ovarian Cancer Than Non-Hispanic Whites after Considering Nongenetic Risk Factors and Oophorectomy Rates." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 24, no. 7 (July 2015): 1094–1100.
349. Wu, Anna H., Celeste L. Pearce, Chiu-Chen Tseng, Claire Templeman, and Malcolm C. Pike. "Markers of Inflammation and Risk of Ovarian Cancer in Los Angeles County." *International Journal of Cancer. Journal International Du Cancer* 124, no. 6 (March 15, 2009): 1409–15.
350. Wu, Song, Wei Zhu, Patricia Thompson, and Yusuf A. Hannun. "Evaluating Intrinsic and Non-Intrinsic Cancer Risk Factors." *Nature Communications* 9, no. 1 (August 28, 2018): 3490.
351. "You Can Steer Clients to Condoms Free from Potentially Harmful Talc: Condom Companies Agree to Produce without the Dry Lubricant." *Contraceptive Technology Update* 16, no. 11 (November 1995): 133–44.
352. Zazenski, R., W. H. Ashton, D. Briggs, M. Chudkowski, J. W. Kelse, L. MacEachern, E. F. McCarthy, M. A. Nordhauser, M. T. Roddy, and N. M. Teetsel. "Talc: Occurrence, Characterization, and Consumer Applications." *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 218–29.
353. Zervomanoklakis, I, H.W. Ott, D Hadziomerovic, V. Mattle, B.E. Seeber, I. Virgolini, D. Heute, S. Kissler, G. Leyendecker, and L. Wildt. "Physiology of Upward Transport in the Human Female Genital Tract." *Annals of New York Academy of Sciences* 1101, no. 1 (2007): 1–20.
354. Zhao, Weixing, Justin B. Steinfeld, Fengshan Liang, Xiaoyong Chen, David G. Maranon, Chu Jian Ma, Youngho Kwon, et al. "BRCA1-BARD1 Promotes RAD51-Mediated Homologous DNA Pairing." *Nature* 550, no. 7676 (19 2017): 360–65.
355. American Board of Obstetrics and Gynecology, Inc. (ABOG), "Guide to Learning in Gynecologic Oncology." Revised 4/2018.
356. AMA Analytical Services, Inc. - Certificate of Analysis - Job Name: Task 3 - Analysis of Official Samples; Job Number: CLIN 1 - Task 3 (Oct. 11, 2019).
357. Analysis report MAS Project #14-1683 dated April 28, 2017 prepared by William Longo, Mark Rigler of the Materials Analytical Services (MAS) laboratory.
358. Analysis of Johnson & Johnson Baby Powder & Valiant Shower to Shower Talc Products for Amphibole (Tremolite) Asbestos, Expert Report, William Longo and Mark Rigler of the Materials Analytical Services (MAS), August 2, 2017.
359. Bureau Veritas Letter re: Johnson's Baby Powder Finished Goods Lot #22318RB (Protocol INV-106924-002) Bureau Veritas Reference: A1910246 (Preliminary Update/Results)
360. Campion, Alan, Kenneth J. Smith, Alexey V. Fedulov, David Gregory, Yuwei Fan and John J. Godleski. "Identification of Foreign Particles in Human Tissue using Raman Microscopy." *Anal Chem* (2018).
361. Cralley, L. J., M. M. Key, D. H. Groth, W. S. Lainhart, and R. M. Ligo. "Fibrous and Mineral Content of Cosmetic Talcum Products." *American Industrial Hygiene Association Journal* 29, no. 4 (August 1968): 350–54.

362. Daubert Order and Opinion, MDL No. 2738.
363. Deposition of Alice M. Blount, Ph.D., April 13, 2018. Gail Lucille Ingham, et al., v. Johnson & Johnson, et al. Case No. 1522-CC10417
364. FDA Executive Summary "Preliminary Recommendations on Testing Methods for Asbestos in Talc and Consumer Products Containing Talc"
365. FDA News Release - Baby powder manufacturer voluntarily recalls products for asbestos.
366. Fletcher, N.M., Amy K. Harper, Ira Memaj, Rong Fan, Robert T. Morris, and Ghassan M. Saed. "Molecular Basis Supporting the Association of Talcum Powder Use with Increased Risk of Ovarian Cancer." *Reproductive Sciences* 1-10 (2019).
367. Fortner, et al. (2019) Ovarian cancer risk factors by tumor aggressiveness: an analysis from the Ovarian Cancer Cohort Consortium.
368. Gabriel, et al. (2019) Douching, talc use and risk for ovarian cancer and conditions related to genital tract inflammation.
369. Gossett, del Carmen. Use of powder in the genital area and ovarian cancer risk: examining the evidence; *JAMA*, 2020;323(1):29-31.
370. Harlow, B. L., and N. S. Weiss. 1989. "A Case-Control Study of Borderline Ovarian Tumors: The Influence of Perineal Exposure to Talc." *American Journal of Epidemiology* 130 (2): 390–94.
371. Harper, Amy K, and Ghassan Saed. "Talc Induces a pro-Oxidant State in Normal and Ovarian Cancer Cells through Genetic Point Mutations in Key Redox Enzymes," Accepted for Presentation at SGO Meeting." In Press 2019.
372. Harper and Saed, SGO poster presentation annual meeting 2018 (Exhibit PSC\_Saed 3).
373. Harrington, et al. (2019) New Guidelines for Statistical Reporting in the Journal, *The New England Journal of Medicine*.
374. Health Canada Poster.
375. Health Canada, "Draft Screening Assessment", Chemical Abstracts Service Registry Number 14807-96-6 (December 2018).
376. IARC Monographs on the Identification of Carcinogenic Hazards to Humans "Report of the Advisory Group to Recommend Priorities for the IARC Monographs during 2020-2024".
377. Institute of Medicine (IOM) Committee on the State of Science in Ovarian Cancer Research. *Ovarian Cancers: Evolving Paradigms in Research and Care*. The National Academies of Sciences, Engineering and Medicine. Washington (DC): National Academies Press (US), 2016.
378. Johnson & Johnson Consumer Inc. to Voluntarily Recall a Single Lot of Johnson's Baby Powder in the United States.
379. La Vecchia. (2017) Ovarian Cancer: Epidemiology and Risk Factors. *European Journal of Cancer Prevention* 2017, 26:55–62.
380. Lheureux, Gourley, Vergote, Oza. Epithelial Ovarian Cancer. *Lancet* 2019; 393: 1240–53.
381. Lloyd, Jillian, Naomi S. Crouch, Catherine L. Minto, Lih-Mei Liao, Sarah M. Creighton. "Female Genital Appearance: 'Normality' Unfolds." *BJOG: an International Journal of Obstetrics and Gynaecology* 112 (May 2005): 643-46.
382. Longo, William E. and Mark W. Rigler. "The Analysis of Johnson & Johnson's Historical Product Containers and Imerys' Historical Railroad Car Samples from the 1960's to the Early 2000's for Amphibole Asbestos", Supplemental Report, January 15, 2019.

383. Longo, William E., and Mark W. Rigler. "The Analysis of Johnson & Johnson's Historical Product Containers and Imerys' Historical Railroad Car Samples from the 1960's to the Early 2,000's for Amphibole Asbestos," 2nd Supplemental Report dated February 1, 2019.
384. Mandarino et al. The effect of talc particles on phagocytes in co-culture with ovarian cancer cells, *Environmental Research*, 2020;180:108676.
385. MAS Project 14-1852, Below the Waist Application of Johnson & Johnson Baby Powder, William Longo, Mark Rigler, and William Egeland of Materials Analytical Services (MAS), September 2017.
386. McDonald et al. Five case studies with correlative light and scanning electron microscopy, *Am J Clin Pathol*, 2019;XX:1-18.
387. McDonald, et al. (2019) Correlative polarizing light and scanning electron microscopy for the assessment of talc in pelvic region lymph nodes.
388. McDonald, et al. (2019) Magnesium/silicon atomic weight percent ratio standards for the tissue identification of talc by scanning electron microscopy and energy dispersive X-ray analysis.
389. McDonald, et al. (2019) Migration of talc from the perineum to multiple pelvic organ sites.
390. Mossman, Brooke T. "Mechanistic in vitro studies: What They Have Told Us About Carcinogenic Properties of Elongated Mineral Particles (EMPs)." *Toxicology and Applied Pharmacology* 361 (2018): 62-67.
391. Mossman, Brooke T., et al. "New Insights into Understanding the Mechanisms, Pathogenesis, and Management of Malignant Mesotheliomas." *The American Journal of Pathology* 182, no. 4 (April 2013): 1065-77.
392. NCI - Ovarian, Fallopian Tube, and Primary Peritoneal Cancer Prevention (PDQ) - Health Professional Version.
393. O'Brien et al. Association of powder use in the genital area with risk of ovarian cancer-supplementary online content.
394. O'Brien et al. Association of powder use in the genital area with risk of ovarian cancer; *JAMA*, 2020;323(1):49-59.
395. O'Brien et al. Genital powder use and risk of ovarian cancer: a pooled analysis - ASPO Abstracts.
396. O'Brien et al. Perineal talc use, douching, and the risk of uterine cancer. *Epidemiology* 2019;30: 845-852.
397. O'Brien and colleagues. Genital Powder Use and Ovarian Cancer Letters to the Editor. *JAMA* May 26, 2020. Vol. 323, Number 20; 2095-2097.
398. RJ Lee Letter and Report re: Analysis of Submitted talc samples RJ Lee Group Project Number TLH910472.
399. RJ Lee Letter and Report re: Incidence Report, RJ Lee Group Project Number TLH910472.
400. RJ Lee Letter and Report re: INV-106924-003, RJ Lee Group Project Number TLH910477.
401. Rothman. Six Persistent Research Misconceptions.
402. Savant, S., Shruthi Sriramkumar and Heather M. O'Hagan. "The Role of Inflammation and Inflammatory Mediators in the Development, Progression, Metastasis, and Chemoresistance of Epithelial Ovarian Cancer."
403. Smith-Bindman R, Poder L, Johnson E, Miglioretti DL. Risk of Malignant Ovarian Cancer Based on Ultrasonography Findings in a Large Unselected Population. *JAMA Intern Med*. 2019 Jan 01; 179(1):71-77.
404. Steffen et al. Serous Ovarian Cancer caused by exposure to asbestos and fibrous talc in cosmetic talc powders - a case series, *JOEM*, 2020; 62(2):e65-e77.
405. Steiling, W., J. F. Almeida, H. Assaf Vandecasteele, S. Gilpin, T. Kawamoto, L. O'Keeffe, G.

- Pappa, K. Rettinger, H. Rothe, and A. M. Bowden. "Principles for the Safety Evaluation of Cosmetic Powders." *Toxicology Letters*, August 17, 2018.
406. Taher, et al, Systematic Review and Meta-Analysis of the Association Between Perineal Use of Talc and Risk of Ovarian Cancer (2019).
  407. TEM Analysis of Historical 1978 Johnson's Baby Powder Sample of Amphibole Asbestos, Expert Report, William Longo and Mark Rigler of Materials Analytical Services (MAS) laboratory, February 16, 2018.
  408. Testimony of Annie Awanais Yessian, M.D., Eva Echeverria, et al. v. Johnson & Johnson, et al. Case No. BC628228, July 13, 2017.
  409. Testimony of Warer K. Huh, M.D., Gail Lucille Ingham, et al., v. Johnson & Johnson, et al., Cause No. 1522-CC10417-01, July 5, 2018.
  410. Trabert, Britton, et al. "Aspirin, Nonaspirin Nonsteroidal Anti-Inflammatory Drug, and Acetaminophen Use and Risk of Invasive Epithelial Ovarian Cancer: A Pooled Analysis in the Ovarian Cancer Association Consortium." *JNCI: Jour Natl Cancer Inst* no. 106, no. 2 (May 31, 2018).
  411. Vitonis et al. (2011) Assessing ovarian cancer risk when considering elective oophorectomy at the time of hysterectomy. *Obstet Gynecol* 2011;117:1042–50.
  412. Wright, Jason D. "What is New in Ovarian Cancer?" *Obstet Gynecol* 132 (2018): 1498-99.
  413. Wu, Song, Wei Zhu, Patricia Thompson, and Yusuf A. Hannun. "Evaluating Intrinsic and Non-Intrinsic Cancer Risk Factors." *Nature Communications* 9, no. 1 (August 28, 2018): 3490.
  414. Bird, Tess, et al. (2021) A Review of the Talc Industry's Influence on Federal Regulation and Scientific Standards for Asbestos in Talc. *Journal of Environmental and Occupational Health Policy* 0(0) 1–18.
  415. Cramer, Daniel, et al. Factors Affecting the Association of Oral Contraceptives and Ovarian Cancer. *N Engl J Med*. 1982;307:1047-51.
  416. Dyer, Owen. Johnson & Johnson Recalls its Baby Powder after FDA Finds Asbestos in Sample. *BMJ* 2019;367I6118.
  417. Emi, T. Transcriptomic and Epigenomic Effects of Insoluble Particles on J774 Macrophages. *Epigenetics* 2021; Vol. 16, No. 10, 1053-1070.
  418. Exponent. Toxic Talc? Anatomy of a Talc Defense powerpoint presentation presented by John DeSesso. January 18, 2018.
  419. The Facts on Talcum Powder Safety. [www.factsabouttalc.com](http://www.factsabouttalc.com)
  420. Fitzgerald Analysis of Johnson & Johnson Baby Powder 1 and 2. Scientific Analytical Institute laboratory.
  421. Gurowitz, Margaret. The Birth of Our Baby Products. Chapter 21. April 30, 2007.
  422. Health Canada Screening Assessment Talc (P1.00000272.0001. April 2021.
  423. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Man: Volume 2," 1973. Some Inorganic and Organometallic Compounds.
  424. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Man: Volume 14," 1977. Asbestos.
  425. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 101," 2013. Some Chemicals Present in Industrial and Consumer Products, Food and Drinking-Water.
  426. Manichaikul, Ani, et al. Identification of Novel Epithelial Ovarian Cancer Loci in Women of African Ancestry. *Int J Cancer*. 2020 June 01; 146(11): 2987–2998.
  427. MVA Scientific Consultants Laboratory. Investigation of Italian Talc Samples for Asbestos. August 1, 2017.
  428. USEPA Prioritized Chronic-Dose Response Values. 2014

429. Yachida, Nozomi, et al. How Does Endometriosis Lead to Ovarian Cancer? The Molecular Mechanism of Endometriosis-Associated Ovarian Cancer Development. *Cancers* 2021, 13, 1439.
430. Williams, Kristina, et al. "Prognostic Significance and Predictors of the Neutrophil-to-Lymphocyte Ratio in Ovarian Cancer." *Gynecol Oncol.* 2014 March ; 132(3): 542–550.
431. Ingham SL, Warwick J, Buchan I, et al. Ovarian cancer among 8,005 women from a breast cancer family history clinic: no increased risk of invasive ovarian cancer in families testing negative for BRCA1 and BRCA2. *J Med Genet* 2013; 50:368.
432. King MC, Walsh T. Testing Ashkenazi Jewish Women for Mutations Predisposing to Breast Cancer in Genes Other Than BRCA1 and BRCA2-Reply. *JAMA Oncol* 2018; 4:1012.
433. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Breast cancer screening and diagnosis. Version 1.2020.  
[http://www.nccn.org/professionals/physician\\_gls/f\\_guidelines.asp](http://www.nccn.org/professionals/physician_gls/f_guidelines.asp) (Accessed on November 11, 2020).
434. Nelson HD, Pappas M, Cantor A, et al. Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer in Women: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA* 2019; 322:666.
435. Peshkin and Isaacs, Genetic testing and management of individuals at risk of hereditary breast and ovarian cancer syndromes, UpToDate April 2021.
436. Struwing JP, Hartge P, Wacholder S, et al. The risk of cancer associated with specific mutations of BRCA1 and BRCA2 among Ashkenazi Jews. *N Engl J Med* 1997; 336:1401.
437. US Preventive Services Task Force, Owens DK, Davidson KW, et al. Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA* 2019; 322:652.
438. Walsh T, Mandell JB, Norquist BM, et al. Genetic Predisposition to Breast Cancer Due to Mutations Other Than BRCA1 and BRCA2 Founder Alleles Among Ashkenazi Jewish Women. *JAMA Oncol* 2017; 3:1647.
439. Goodman, J., et al. A Critical Review of Talc and Ovarian Cancer. *J Toxicol Environ Health, Part B* 2020; 23(5):185-213.
440. Childers, CP et al. National Estimates of Genetic Testing in Women with a History of Breast or Ovarian Cancer. *Journal of Clinical Oncology*, 2017 Dec. 1; 35 (34)3800-3806.
441. Compton, SA et al. Ring shaped RAD51 Paralog Protein Complexes Bind Holliday Junctions and Replication Forks as Visualized by Electron Microscopy. *The Journal of Biological Chemistry* 2010; 285:13349.
442. Curia, Maria Cristina et al. MUTYH: Not just polyposis. *World Journal of Clinical Oncology* vol. 11,7 (2020): 428-449.
443. Davis, Colette et al. Genital powder use and risk of epithelial ovarian cancer in the Ovarian Cancer in Women of African Ancestry Consortium. *Cancer Epidemiol Biomarkers Prev.* 2021.
444. Dominguez-Valentin, M et al. Cancer risks by gene, age, and gender in 6350 carriers of pathogenic mismatch repair variants: findings from the Prospective Lynch Syndrome Database. *Genetics in Med* 2020; 22:15.
445. Ewald, Ingrid et al. Genomic rearrangements in BRCA1 and BRCA2: A literature review. *Genetics and Molecular Biology*, 32, 3, (2009) 437-446.
446. Fanale D, Fiorino A, Incorvaia L, et al. Prevalence and Spectrum of Germline BRCA1 and BRCA2 Variants of Uncertain Significance in Breast/Ovarian Cancer: Mysterious Signals from the Genome. *Front Oncol.* 2021;11:682445.
447. Federici, Giulia, Variants of uncertain significance in the era of high-throughput genome sequencing: a lesson from breast and ovary cancers. *Journal of Experimental & Clinical Cancer*

Research 2020; 39:46.

448. Frank, TS et al. Clinical characteristics of individuals with germline mutations in BRCA1 and BRCA2. *J Clin Oncol* 2002; 20:1480.
449. Frey MK, Kim SH, Bassett RY, Martineau J, Dalton E, Chern JY, Blank SV. Rescreening for genetic mutations using multi-gene panel testing in patients who previously underwent non-informative genetic screening. *Gynecol Oncol.* 2015 Nov;139(2):211-5.
450. Garcia-de-Teresa et al. Chromosome Instability in Fanconi Anemia: From Breaks to Phenotypic Consequences. *GENES* 2020; 11:1528.
451. Gene-Disease Validity Classification Summary, MUTYH - familial ovarian cancer, Clinical Genome Resource. URL [08.22.2021]
452. George, Sophia et al. Proliferation in the Normal FTE Is a Hallmark of the Follicular Phase, Not BRCA Mutation Status. *Clinical Cancer Research* 2012.
453. Greaves, M. How many mutations does it take? The Darwin Cancer Blog, *BMJ* 10/26/2015
454. Hall JM, Lee MK, Morrow J, Newman B, Anderson LA, Huey B, King M-C. Linkage of early-onset familial breast cancer to chromosome 17q21. *Science* 1990; 250:1684-1689.
455. Han E, Yoo J, Chae H, Lee S, Kim DH, Kim KJ, Kim Y, Kim M. Detection of BRCA1/2 large genomic rearrangement including BRCA1 promoter-region deletions using next-generation sequencing. *Clin Chim Acta.* 2020 Jun;505:49-54.
456. Heather, JM and Chain, B. The sequence of sequencers: The history of sequencing DNA. *Genomics* 2016; 107:1.
457. Hodan et al. Prevalence of Lynch Syndrome in women with mismatch repair-deficient ovarian cancer. *Cancer Med* 2021; 10:1012.
458. Hutchcraft, Megan L et al. MUTYH as an Emerging Predictive Biomarker in Ovarian Cancer. *Diagnostics (Basel, Switzerland)* vol. 11,1 84. 6 Jan. 2021.
459. Jackson, Sarah et al. Characteristics of Individuals With Breast Cancer Rearrangements in BRCA1 and BRCA2. *Cancer* 2014 May 15; 120(10): 1557-1564.
460. Knudson,AG. Mutation and cancer: a statistical study of retinoblastoma. *PNAS USA* 1971;98:820.
461. Konstantinopoulos PA, Norquist B, Lacchetti C, Armstrong D, Grisham RN, Goodfellow PJ, Kohn EC, Levine DA, Liu JF, Lu KH, Sparacio D, Annunziata CM. Germline and Somatic Tumor Testing in Epithelial Ovarian Cancer: ASCO Guideline. *J Clin Oncol.* 2020 Apr 10;38(11):1222-1245.
462. Kuchenbaecker KB, et al. Risks of Breast, Ovarian, and Contralateral Breast Cancer for BRCA1 and BRCA2 Mutation Carriers. *JAMA* 2017 Jun 20;317(23):2402-2416.
463. Lee, Kristy et al. Clinical Validity Assessment of Genes Frequently Tested on Hereditary Breast and Ovarian Cancer Susceptibility Sequencing Panels. *Genet Med.* 2019 July ; 21(7): 1497–1506.
464. Lewis, Ricki “What’s a “Variant of Uncertain Significance?” A VUS?”  
<https://dnascience.plos.org/2018/05/03/whats-a-variant-of-uncertain-significance-a-vus/>
465. Lincoln, S. A Systematic Comparison of Traditional and Multigene Panel Testing for Hereditary Breast and Ovarian Cancer Genes in More Than 1000 Patients. *J Mol Diagn* 2015, 17: 533-544
466. Lu, KH and Daniels, MC, Endometrial and Ovarian Cancer in Women with Lynch Syndrome: Update on Screening and Prevention. *Fam Cancer* 2013; 12:273.
467. Martincorena, et al. Universal Patterns of Selection in Cancer and Somatic Tissues. *Cell* 2017;171:1029 .
468. Morjaria, S. Driver mutations in Oncogenesis. *International J of Molecular and Immunooncology* 2020; 6:100
469. Nielsen, F., van Overeem Hansen, T. & Sorensen, C. Hereditary breast and ovarian cancer: new

- genes in confined pathways. *Nat Rev Cancer* 16, 599–612 (2016).
470. Piombino et al. Secondary Prevention in Hereditary Breast and/or Ovarian Cancer Syndromes Other than BRCA. *J Oncol* 2020:6384190.
471. Plon, SE et al. Sequence variant classification and reporting: recommendations for improving the interpretation of cancer susceptibility genetic tests results. *Hum Mutat* 2008;29:1282.
472. Richards, Sue et al. Standards and guidelines for the interpretation of sequence variants: a joint consensus recommendation of the American College of Medical Genetics and Genomics and the Association for Molecular Pathology. *Genetics in medicine : official journal of the American College of Medical Genetics* vol. 17,5 (2015): 405-24.
473. Schorge, John O et al. SGO White Paper on ovarian cancer: etiology, screening and surveillance. *Gynecologic oncology*. 2010; vol. 119,1: 7-17.
474. Terdiman, Jonathan P. MYH-associated disease: attenuated adenomatous polyposis of the colon is only part of the story.” *Gastroenterology* vol. 137,6 (2009): 1883-6.
475. Verma M, Kulshrestha S, Puri A. Genome Sequencing. *Methods Mol Biol*. 2017;1525:3-33.
476. Vogt, Stefanie et al. Expanded extracolonic tumor spectrum in MUTYH-associated polyposis. *Gastroenterology* vol. 137,6 (2009): 1976-85.e1-10.
477. Wallace, AJ. New challenges for BRCA testing: a view from the diagnostic laboratory. *Eur J Hum Genet* 2016; 24:S10.
478. Wentzensen, Nicolas, O'Brien, Katie M. Talc, body powder, and ovarian cancer: A summary of the epidemiologic evidence. *Gynecologic Oncology* 2021,ISSN0090-8258
479. Wilson, M K et al. Fifth Ovarian Cancer Consensus Conference of the Gynecologic Cancer InterGroup: recurrent disease. *Annals of oncology : official journal of the European Society for Medical Oncology* 2017; vol. 28,4: 727-732.
480. Win, Aung Ko et al. Risk of extracolonic cancers for people with biallelic and monoallelic mutations in MUTYH. *Int J Cancer*. 2016 October 1; 139(7): 1557–1563.
481. Wooster, R et al. Identification of breast cancer susceptibility gene BRCA2. *Nature* 1994;378:789.
482. Wright, Maya A et al. Douching or Perineal Talc Use and Prevalent Fibroids in Young African American Women. *Journal of women's health* 5 Mar. 2021
483. Yang, X et al. Ovarian and Breast Cancer Risks Associated with Pathogenic Variants in RAD51C and RAD51D. *JCNI* 2020; 112.
484. Peres, Lauren, et al. Racial Differences in Population Attributable Risk for Epithelial Ovarian Cancer in the OCWAA Consortium. *JCNI* 2021; 113(6): djaa188.
485. Alvi, Q et al. Demographic, Lifestyle and Reproductive Factors Associated with Ovarian Cancer Among Married Women in Pakistan. *Journal of Namibian Studies*. 35 (2023): 2029-2041.
486. Ambarak, Mariam Farag. Discovering of Asbestos Fibers and Corn Starch in Talc Material for Baby Powder Samples from Different Markets in Benghazi City. *Ad J Chem B* 2023. 5(3): 261-270.
487. American Cancer Society. “Talcum Powder and Cancer.” Statement, December 6, 2022.
488. APHA. “Eliminating Exposure to Asbestos.” Statement, November 5, 2019.
489. Borm, Paul J.A. Talc Inhalation in Rats and Humans. *JOEM* February 2023. 65(2): 152-159.
490. Brieger, K et al. High Pre-Diagnosis Inflammation-Related Risk Score Associated with Decreased Ovarian Cancer Survival. *Cancer Epidemiol Biomarkers Prev*. 2022 February; 31(2): 443-452.
491. Brieger, K et al. High Pre-Diagnosis Inflammation-Related Risk Score Associated with Decreased Ovarian Cancer Survival. Supplemental 1 Tables. 2022.
492. Brieger, K et al. High Pre-Diagnosis Inflammation-Related Risk Score Associated with Decreased Ovarian Cancer Survival. Supplemental 2 Table. 2022.
493. Ciocan, C et al. Mortality in the Cohort of Talc Miners and Millers from Val Chisone, Northern Italy: 74 Years of Follow Up. *Environmental Research* 203 (2022): 111865.

494. Cramer, Daniel. The Association of Talc Use and Ovarian Cancer: Biased or Causal Letter to the Editor. *Gynecologic Oncology Reports* 41 (2022).
495. Davis, C et al. Genital Powder Use and Risk of Epithelial Ovarian Cancer in the Ovarian Cancer in Women of African Ancestry Consortium. *Cancer Epidemiol Biomarkers Prev.* 2021; 30: 1660-8.
496. Ding, D et al. Insights into the Role of Oxidative Stress in Ovarian Cancer. *Oxidative Medicine and Cellular Longevity* Vol. 2021. <https://doi.org/10.1155/2021/8388258>.
497. Federal Register. Asbestos; Reporting and Recordkeeping Requirements Under the Toxic Substances Control Act (TSCA). A Final Rule by the EPA on July 25, 2023.
498. Ferrante, D et al. Italian Pool of Asbestos Workers Cohorts: Mortality Trends of Asbestos-Related Neoplasms after Long Time since First Exposure. *Occup Environ Med* 2017; 74: 887-898.
499. Goodman, J et al. A Critical Review of Talc and Ovarian Cancer. *Journal of Toxicology and Environmental Health, Part B* 2020; 23:5, 183-213.
500. Gossett, D and del Carmen, M. Use of Powder in the Genital Area and Ovarian Cancer Risk Letter to the Editor. *JAMA* January 7, 2020. Volume 323, Number 1.
501. Henley, S et al. Geographic Co-Occurrence of Mesothelioma and Ovarian Cancer Incidence. *J Womens Health* January 2020; 29(1): 111-118.
502. Huang, T et al. Estimated Number of Lifetime Ovulatory Years and Its Determinants in Relation to Levels of Circulating Inflammatory Biomarkers. *Am J Epidemiol* 2020; 189(7): 660-670.
503. Hurwitz, L et al. Modification of the Association Between Frequent Aspirin Use and Ovarian Cancer Risk: A Meta-Analysis Using Individual-Level Data From Two Ovarian Cancer Consortia. *J Clin Oncol* 2022.
504. Leung, L et al. Occupational Environment and Ovarian Cancer Risk. *Occup Environ Med* 2023; 0:1-9.
505. Lynch, H et al. Systematic Review of the Association Between Talc and Female Reproductive Tract Cancers. *Frontiers in Toxicology* August 7, 2023.
506. Lynch, H et al. Systematic Review of the Association Between Talc and Female Reproductive Tract Cancers. *Frontiers in Toxicology*. Supplemental Online Content.
507. Micha J et al. Talc Powder and Ovarian Cancer: What is the Evidence? *Arch Gynecol Obstet* 2022; 306: 931-933.
508. National Cancer Institute. Asbestos – Cancer-Causing Substances. March 29, 2022.
509. National Cancer Institute. Ovarian, Fallopian Tube, and Primary Peritoneal Cancers Prevention (PDQ) Health Professional Version. October 16, 2023.
510. Nowak, D et al. Asbestos Exposure and Ovarian Cancer - a Gynecological Occupational Disease. Background, Mandatory Notification, Practical Approach. *Geburtshilfe Frauenheilkd* 2021 May; 81(5): 555-561.
511. O'Brien, K et al. Douching and Genital Talc Use: Patterns of Use and Reliability of Self-Reported Exposure Manuscript.
512. Johnson & Johnson's Baby Powder: A Comprehensive Review (in Response to Health Canada). March 17, 2020.
513. Pal, T et al. BRCA1 and BRCA2 Mutations Account for a Large Proportion of Ovarian Carcinoma Cases. *Cancer* December 15, 2005; 104(12): 2807-16.
514. Permuth-Wey, J et al. Epidemiology of Ovarian Cancer: An Update. *Advances in Diagnosis and Management of Ovarian Cancer*. 2014.
515. Phung, M et al. Effects of Risk Factors for Ovarian Cancer in Women With and Without Endometriosis. *Fertil and Steril* 2022.
516. Phung, M et al. Effects of Risk Factors for Ovarian Cancer in Women With and Without

Endometriosis. Supplemental Content Online.

517. Santosh, S et al. "Oxidative Stress in the Pathogenesis of Ovarian Cancer." Handbook of Oxidative Stress in Cancer: Therapeutic Aspects. 2022. [https://doi.org/10.1007/978-981-16-5422-0\\_226](https://doi.org/10.1007/978-981-16-5422-0_226)
518. Schildkraut, J. Invited Commentary: Relationship Between Ovulation and Markers of Systemic Inflammation Versus Markers of Localized Inflammation. *Am J Epidemiol.* 2020; 189(7): 671-673.
519. Slomovitz, B et al. Asbestos and Ovarian Cancer: Examining the Historical Evidence. *Int J Gynecol Cancer* 2021; 31: 122-128.
520. Tanha, Kiarash et al. Investigation on Factors Associated with Ovarian Cancer: An Umbrella Review of Systematic Review and Meta-Analyses. *Journal of Ovarian Research* 2021; 14: 153.
521. Tran, T and Egilman, D. Response to Micha et al. (2022) Talc Powder and Ovarian Cancer: What is the Evidence? *Archives of Gynecology and Obstetrics* December 2022.
522. Vidican, P et al. Frequency of Asbestos Exposure and Histological Subtype of Ovarian Carcinoma. *Int J Environ Res Public Health* 2022; 19 (5383).
523. Walsh, T et al. Mutations in 12 Genes for Inherited Ovarian, Fallopian Tube and Peritoneal Carcinoma Identified by Massively Parallel Sequencing. *PNAS* November 1, 2011. 108 (44).
524. Wentzensen, N and O'Brien, K. Talc, Body Powder, and Ovarian Cancer: A summary of the Epidemiologic Evidence. *Gynecologic Oncology* July 2021. <https://doi.org/10.1016/j.ygyno.2021.07.032>
525. Woolen S, Lazar, A and Smith-Bindman, R. Association Between the Frequent Use of Perineal Talcum Powder Products and Ovarian Cancer: A Systematic Review and Meta-Analysis. *J Gen Intern Med* 2022.
526. Woolen S, Lazar, A and Smith-Bindman, R. Association Between the Frequent Use of Perineal Talcum Powder Products and Ovarian Cancer. Supplemental Content Online.
527. Yin, YS and Liu, HY. The Asbestos Contamination of Body Powder and Its Effect on Ovarian Health. February 4, 2022. <https://doi.org/10.21203/rs.3.rs-1237040/v1>.
528. American Cancer Society. Cancer Facts and Figures 2023.
529. Haidach, AB. Meta-Analysis in Medical Research. *Hippokratia* 2010, 14 (Suppl 1): 29-37.
530. Song, J. and Chung, K. Observational Studies: Cohort and Case-Control Studies. *Plast Reconstr Surg.* 2010 December; 126(6): 2234–2242.
531. Harper AK, Wang X, Fan R, Kirsch Mangu T, Fletcher NM, Morris RT, et al. Talcum Powder Induces Malignant Transformation in Normal Human Primary Ovarian Epithelial Cells. *Minerva Obstet Gynecol* 2023;75:150-7.
532. Kim S., et al. Asbestos Exposure and Ovarian Cancer: A Meta Analysis. *Safety and Health at Work* 2023.
533. Turati F., et al. Occupational Asbestos Exposure and Ovarian Cancer: Updated Systematic Review. *Occupational Medicine* 2023.
534. 3rd Supplemental MDL Report W. Longo 11-17-23.
535. O'Brien KM et al. Intimate Care Products and Incidence of Hormone-Related Cancers: A Quantitative Bias Analysis. *J Clin Oncol* 00:1-15 (2024).
536. Sanchez-Prieto M et al. Etiopathogenesis of Ovarian Cancer. An Inflamm-aging Entity? *Gyn Onc Reports* 42 (2022) 101018.
537. Harris H et al. Epidemiologic Methods to Advance Our Understanding of Ovarian Cancer Risk. *J Clin Oncol* 00:1-3 (2024).

538. Hagelund N. Study Finds Association Between Genital Talc Use and Increased Risk of Ovarian Cancer. Am Soc of Clin Onc, ASCO Perspective, May 15, 2024. <https://society.asco.org/about-asco/press-center/news-releases/study-finds-association-between-genital-talc-use-and-increased>

**Company Documents**

1. IMERYS 088907
2. IMERYS 210136
3. IMERYS048311
4. IMERYS051370
5. IMERYS053387
6. IMERYS088907
7. IMERYS090653
8. IMERYS094601
9. IMERYS098115
10. IMERYS105215
11. IMERYS137677/P-594
12. IMERYS210136
13. IMERYS210729
14. IMERYS219720
15. IMERYS230366
16. IMERYS241866
17. IMERYS245144/P-659
18. IMERYS248877
19. IMERYS255101
20. IMERYS255224
21. IMERYS255384
22. IMERYS255394
23. IMERYS255395
24. IMERYS279884
25. IMERYS279968
26. IMERYS281335
27. IMERYS281776
28. IMERYS284935
29. IMERYS304036
30. IMERYS304036
31. IMERYS324700
32. IMERYS342524
33. IMERYS406170
34. IMERYS422289
35. IMERYS467511
36. IMERYS-A\_0011817
37. IMERYS-A\_0015663
38. IMERYS-A\_0024548
39. J&J S2s and BP Product Analysis (1972)
40. JANSSEN-000001/P-22

41. JANSSEN-000056/P-23  
42. JNJ 000251888  
43. JNJ000000704/P-396  
44. JNJ000011150  
45. JNJ000016645  
46. JNJ000019415  
47. JNJ000026987  
48. JNJ000030027  
49. JNJ000062359  
50. JNJ000062436  
51. JNJ000063951  
52. JNJ000064544  
53. JNJ000064762  
54. JNJ000065264  
55. JNJ000065601  
56. JNJ000087166  
57. JNJ000087710  
58. JNJ000087716  
59. JNJ000089413  
60. JNJ000231422  
61. JNJ000232996  
62. JNJ000236810  
63. JNJ000237076  
64. JNJ000238021  
65. JNJ000245002  
66. JNJ000245678  
67. JNJ000245762  
68. JNJ000246467  
69. JNJ000247375  
70. JNJ000251888  
71. JNJ000260570  
72. JNJ000260697  
73. JNJ000260709  
74. JNJ000261010  
75. JNJ000264743  
76. JNJ000265171  
77. JNJ000265536  
78. JNJ000277941  
79. JNJ000279507  
80. JNJ000314315  
81. JNJ000314406  
82. JNJ000347962  
83. JNJ000348778  
84. JNJ000381995  
85. JNJ000404860  
86. JNJ000460665  
87. JNJ000521616

88. JNJ000526750
89. JNJ000025132
90. JNJ000046293
91. JNJ000260700
92. JNJAZ55\_000000577
93. JNJAZ55\_000000905
94. JNJAZ55\_000004563
95. JNJAZ55\_000006341
96. JNJAZ55\_000008177
97. JNJL61\_000014431
98. JNJMX68\_000003728
99. JNJMX68\_000012858
100. JNJMX68\_000013019
101. JNJMX68\_000013945
102. JNJMX68\_000017827
103. JNJNL61\_000079334
104. LUZ013094/P-26
105. P-321
106. P-47
107. PCPC\_MDL00062175
108. PCPC0075758
109. RJLEE-001497
110. WCD 002478 - Exhibit 32 Waldstreicher
111. Pltf\_MISC\_00000272 (JANSSEN-000001-19) 1962.
112. RA00461
113. RA00462
114. RA00469-70
115. RA00471-72
116. RA00473
117. RA00474
118. RA00475
119. RA00476
120. RA00477-78
121. JNJTALC001465273

**Medical Records of Linda Bondurant (Defense)**

BondurantL-MDAMR-00001-01263  
BondurantL-MDAMR-01264  
BondurantL-MDAPath-00001  
BondurantL-TCCMR-00001-00006  
BondurantL-TCCMR-00007-01725  
BondurantL-TCCPATH-00001-00005  
BondurantL-TCCRad-00001-00007  
BondurantL-TCCRad-00008-00012  
BondurantL-TUMR-00296-01893  
BondurantL-TUMR-01894-01897  
BondurantL-TURad-00001-00006  
BondurantL-TURad-00007-00013  
BondurantL-TURad-00014-00019  
BondurantL-WilliamsC-00001-00042

**Miscellaneous**

Affidavit of Linda Bondurant  
Death Certificate of Linda Bondurant  
Deposition of Jamie Miller, dated 03/18/2021  
Deposition of Dr. Judith Wolf, dated 09/13/2021  
Deposition of Dr. Judith Wolf, dated 09/14/2021  
Plaintiff Profile Form for Linda Bondurant

Amended Expert Report of Shawn Levy, PhD  
Expert Report of Bernard Harlow, PhD and Kenneth Rothman, Dr.P.H.  
Expert Report of Michele Cote, PhD, MPH  
MDL Johnsons' BP Application and Exposure Container Calculations for Six OVCA Victims Bellwether Cases  
Second Amended Expert Report of Anne McTiernan, MD, PhD  
Second Amended Expert Report of Jack Siemiatycki, PhD  
Second Amended Expert Report of Rebecca Smith-Bindman, MD  
Supplemental Report of Patricia Moorman, MSPH, PhD  
Supplemental Report of Sonal Singh, MD, MPH  
Third Supplemental MDL Report of William Longo, PhD

# Exhibit C

**Judith Wolf, MD****Medical Legal Testimony in last 4 years**

Date: January, 2019

Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Product Liability  
Litigation Docket No. 2738

Date: August 30, 2021, and August 31, 2021

Elen Klenke v. Johnson & Johnson et al.

Court of Common Pleas, First Judicial District of Pennsylvania

Date: September 13, 2021 and September 14, 2021

Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Product Liability  
Litigation MDL No. 273

Date: January 10, 2022, and April 25, 2024

Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Product Liability  
Litigation MDL No. 273

Date: April 25, 2024

Grand Canyon Joe Carl v. Johnson & Johnson, et al.

United States District Court for the District of New Jersey

**Hourly Rate: \$650/hour**

# **EXHIBIT 20**

Gynecologic Oncology: Original Research

# Risk of Gynecologic Cancer According to the Type of Endometriosis

Liisu Saavalainen, MD, Heini Lassus, MD, PhD, Anna But, MSc, Aila Tiitinen, MD, PhD,  
Päivi Härkki, MD, PhD, Mika Gissler, PhD, Eero Pukkala, PhD, and Oskari Heikinheimo, MD, PhD

**OBJECTIVE:** To assess the risks of gynecologic cancer according to the type of endometriosis in women with surgically verified endometriosis.

**METHODS:** This is a population-based study of women with surgically verified endometriosis retrieved from the Finnish Hospital Discharge Register 1987–2012 (N=49,933); the subtypes of ovarian (n=23,210), peritoneal (n=20,187), and deep infiltrating (n=2,372) endometriosis were analyzed separately. Gynecologic cancers were obtained from the Finnish Cancer Registry. The outcome measure was the standardized incidence ratio (95% CI) calculated as the ratio between the observed to the expected number of cancers and defined for each gynecologic cancer and further stratified according to the histology, follow-up time since surgery, and age at follow-up. The follow-up was 838,685 person-years, and the Finnish female population served as the reference.

**RESULTS:** Endometriosis was associated with increased risk of ovarian cancer (standardized incidence ratio 1.76 [95% CI 1.47–2.08]), especially with endometrioid (3.12 [2.15–4.38]) and clear cell (5.17 [3.20–7.89]) histologic type and to a lesser extent with serous type (1.37 [1.02–1.80]). The risk of ovarian cancer was highest among women with ovarian endometriosis and especially for endometrioid (4.72 [2.75–7.56]) and clear cell (10.1 [5.50–16.9]) ovarian cancer, occurring 5–10 years after the index surgery. The overall risk of ovarian cancer was not increased among women with peritoneal and deep infiltrating endometriosis. However, peritoneal endometriosis was associated with a twofold increase in risk of endometrioid histology. The risk of endometrial cancer was not altered in the entire cohort. The standardized incidence ratio for precancerous cervical lesions was 0.81 (0.71–0.92) and for invasive squamous cell carcinoma of the cervical cancer 0.46 (0.20–0.91).

**CONCLUSION:** The excess risk of ovarian cancer among women with ovarian endometriosis translates into two excess cases per 1,000 patients followed for 10 years. Acknowledging these risks is important when planning long-term management of women with endometriosis.

(Obstet Gynecol 2018;131:1095–102)

DOI: 10.1097/AOG.0000000000002624

From the Departments of Obstetrics and Gynecology and Public Health, University of Helsinki and Helsinki University Hospital, Helsinki, and the National Institute for Health and Welfare, Helsinki, Finland; the Department of Neurobiology, Care Sciences and Society, Division of Family Medicine, Karolinska Institute, Stockholm, Sweden; and the Finnish Cancer Registry, Helsinki, and the Faculty of Health Sciences, University of Tampere, Tampere, Finland.

The research funds of the Hospital District of Helsinki and Uusimaa supporting this study are gratefully acknowledged.

Presented in part at the 13th World Congress on Endometriosis, May 17–20, 2017, Vancouver, British Columbia, Canada.

The data were obtained from the Finnish Hospital Discharge Register, the Finnish Cancer Registry, and the Finnish Population Register Center.

Each author has indicated that he or she has met the journal's requirements for authorship.

Corresponding author: Oskari Heikinheimo, MD, PhD, Department of Obstetrics and Gynecology, Helsinki University Hospital, PO Box 140, FI-00029 HUS Helsinki, Finland; email: oskari.heikinheimo@helsinki.fi.

## Financial Disclosure

The authors did not report any potential conflicts of interest.

© 2018 by American College of Obstetricians and Gynecologists. Published by Wolters Kluwer Health, Inc. All rights reserved.

ISSN: 0029-7844/18

The association between endometriosis and cancer has been studied intensively. Endometriosis is characterized by chronic inflammation, tissue-specific excess production of estrogen, and resistance to progesterone,<sup>1</sup> which characteristics may also predispose to cancer. In addition, endometriosis presents cancer-like characteristics such as tissue invasion, angiogenesis, and decreased apoptosis.<sup>2,3</sup>

An increased risk of ovarian cancer among women with endometriosis has been found in several cohort and case-control studies with relative risk between 1.3 and 1.9.<sup>4–6</sup> The relative risk has been higher for clear cell and endometrioid types of ovarian cancer.<sup>4,7–9</sup> Endometriosis or its atypical form are found in one third of endometrioid and clear cell



ovarian carcinomas.<sup>10,11</sup> Similar molecular changes have been detected in the nearby endometriosis as in the cancer (ie, *ARID1A*, *PTEN*, *HNF1B*, and *PIK3CA* *K-ras* mutations).<sup>10</sup> Thus, endometriosis is considered to be a risk factor for ovarian cancer or it may act as a precursor lesion for clear cell and endometrioid ovarian carcinomas. Findings suggesting an association of endometriosis and other gynecologic cancers have been less clear.<sup>4,6</sup>

The gold standard for diagnosing endometriosis is surgery.<sup>12</sup> In the present study, we assessed the risk of gynecologic cancers among women with a surgical diagnosis of endometriosis. Because little is known about the risk of cancer related to specific subtypes of endometriosis, the patients were further classified into ovarian, peritoneal, and deep infiltrating endometriosis.

## MATERIALS AND METHODS

Before initiation, this population-based study was approved by the ethics committee of the Hospital District of Helsinki and Uusimaa (238/13/03/03/2013). Permission to utilize the data and the linkages was provided by the National Institute for Health and Welfare (THL/546/5.05.00.2014) and the Population Register Center (D1794/410/14), as required by legislation.

The formation and description of the cohort has been described in detail elsewhere.<sup>13</sup> The Finnish Hospital Discharge Register is national and includes personal identity codes, codes of diseases according to the International Classification of Diseases (ICD), and dates for each hospital visit.<sup>14</sup> The data have been collected regularly since 1968 for the cohort population database. The ICD codes are set by the managing clinician for each hospital visit based on their clinical relevance. In the Finnish health care system, ICD codes are primarily for clinical purposes. According to the systematic review, more than 95% of discharges have been identified from the Finnish Hospital Discharge Register.<sup>15</sup> Our quality assessment of the diagnoses of endometriosis in Finnish Hospital Discharge Register records showed 97% to be correctly reported from the hospital to the register and 95% of diagnoses from the register were correctly in our cohort.<sup>13</sup>

To include all surgically diagnosed cases, we collected the present cohort from the Finnish Hospital Discharge Register by using appropriate diagnostic codes for endometriosis (ICD, 9th Revision [1987–1995]: 6171A, 6172A, 6173A, 6173B, 6174A, 6175A, 6176A, 6178X, 6179X; ICD, 10th Revision [1996–2012]: N80.1–N80.6, N80.8, N80.80, N80.81, N80.89, N80.9), as a main or subsidiary diagnosis,

in combination with relevant concomitant surgical codes from 1987 to 2012 (N=49,933). The discharge date of the first hospital visit fulfilling the inclusion criteria was used as the index day. The cohort consisted of inpatients from both the public and private sectors. Information on day surgeries was available from 1994 onward. The diagnosis of adenomyosis was not included when existing alone.

The patients were further classified into subcohorts of endometriosis according to the diagnosis determined at the index procedure: ovarian (n=23,210), peritoneal (n=20,187), deep infiltrating (n=2,372), mixed (ovarian and deep infiltrating concomitantly, n=1,120), and other endometriosis (n=3,044) (Table 1). The diagnoses of ovarian and deep infiltrating endometriosis were identified firstly. The diagnosis of peritoneal endometriosis was identified second. Third, those not identified in the previous categories formed the subcohort of other endometriosis. The disease consisting of both ovarian and deep infiltrating endometriosis formed the subcohort of mixed endometriosis.

To assess information on incident cancers, the endometriosis cohort was linked to the Finnish Cancer Registry, which keeps a register of all diagnosed cancers and precancerous stages in Finland from 1953 onward and represents high quality in completeness and accuracy of the registered data.<sup>16,17</sup> The registry includes the personal identity code, the date of cancer diagnosis, and topography and morphology of the specified cancers. The follow-up started on the index day and ended on the day of emigration, death, or December 31, 2014, whichever came first. Information on emigration and death was received from the Finnish Population Register Center. When assessing risk of cancers of the uterine corpus and of the cervix, the follow-up ended in hysterectomy among the endometriosis cohort. Similarly, when assessing risk of ovarian cancer and borderline tumors of the ovary, the follow-up ended in unilateral or bilateral oophorectomy among the endometriosis cohort. Dates of hysterectomies and oophorectomies were detected from the Finnish Hospital Discharge Register using the specific procedural codes.

The data on hysterectomies and oophorectomies from the years before our study were not available, which may underestimate the standardized incidence ratio for uterine, cervical, and ovarian cancer and borderline tumors of the ovary. In addition, hysterectomies and oophorectomies in the Finnish female population were not available, which lowers the population reference rates.<sup>18</sup> Consequently, the standardized incidence ratios for uterine, cervical, and ovarian cancers in this study are slightly too high.



**Table 1. The Formation of the Subcohorts of Endometriosis According to the International Classification of Diseases, 9th and 10th Revisions, and the Possible Additional Subsidiary Diagnosis of Endometriosis**

Subcohort of Endometriosis	ICD, 9th Revision	ICD, 10th Revision	Possible Additional Subsidiary Diagnosis of Endometriosis
Ovarian	6171A	N80.1	Peritoneal, other
Deep infiltrating			Peritoneal, other
Rectovaginal	6174A	N80.4	
Intestine	6175A	N80.5	
Bladder	—	N80.80	
Sacruterine ligaments	—	N80.81	
Mixed			Peritoneal, other
(Ovarian concomitantly with deep infiltrating) <sup>1</sup>	6171A+	N80.1+	
	6174A/6175A	N80.4/N80.5/N80.80/N80.81	
Peritoneal			Other
Tubal	6172A	N80.2	
Peritoneal	6173A	N80.3	
Retrouterinal	6173B	—	
Other			—
Cicatrix cutis	6176A	N80.6	
Other specified	6178X	N80.8, N80.89	
Other unspecified	6179X	N80.9	

ICD, International Classification of Diseases.  
Dash indicates that there is no similar diagnosis in this revision of the ICD or lack of possible additional subsidiary diagnosis.

Person-years of follow-up were calculated by 5-year age categories and calendar periods and by time since the index day (less than 0.5, 0.5–4.9, 5–9.9, 10 years or greater). The standardized incidence ratio was calculated as the ratio between the observed and the expected number of cancers in each stratum. The expected number was defined by multiplying the accumulated person-years of

**Table 2. Number of Women With Surgically Verified Endometriosis by Age at Index Procedure and the Number of Person-Years by Age at Follow-up**

Age (y)	Whole Cohort			Subtype of Endometriosis		
	All	Censored at Hysterectomy	Censored at Oophorectomy	Ovarian	Peritoneal	Deep
No. of women						
10–19	525 <sup>(1)</sup>	522 <sup>(1)</sup>	502 <sup>(1)</sup>	121 <sup>(1)</sup>	343 <sup>(2)</sup>	24 <sup>(1)</sup>
20–29	12,685 (25)	12,638 (36)	12,044 (33)	4,888 (21)	5,835 (29)	839 (35)
30–39	18,027 (36)	15,775 (45)	15,501 (42)	7,896 (34)	7,673 (38)	865 (36)
40–49	15,286 (31)	5,778 (16)	7,872 (22)	8,249 (36)	5,374 (27)	514 (22)
50–59	2,985 (6)	560 <sup>(2)</sup>	539 <sup>(1)</sup>	1,800 <sup>(8)</sup>	850 <sup>(4)</sup>	109 (5)
60 or more	425 <sup>(1)</sup>	99 (0)	66 (0)	256 <sup>(1)</sup>	112 <sup>(1)</sup>	21 (1)
All	49,933 (100)	35,372 (100)	36,524 (100)	23,210 (100)	20,187 (100)	2,372 (100)
Person-years by age						
10–19	676 (0)	666 (0)	639 (0)	154 (0)	446 (0)	34 (0)
20–29	51,212 <sup>(6)</sup>	50,905 <sup>(10)</sup>	48,139 <sup>(9)</sup>	18,268 <sup>(5)</sup>	25,326 <sup>(7)</sup>	3,286 <sup>(11)</sup>
30–39	186,115 <sup>(22)</sup>	172,793 (36)	165,870 (30)	74,168 <sup>(19)</sup>	86,189 <sup>(24)</sup>	10,111 (35)
40–49	263,145 (31)	162,291 (33)	187,324 (34)	117,459 (31)	117,878 (32)	8,362 <sup>(29)</sup>
50–59	220,562 <sup>(26)</sup>	76,401 <sup>(16)</sup>	112,703 <sup>(20)</sup>	109,863 <sup>(29)</sup>	91,023 <sup>(25)</sup>	4,993 <sup>(17)</sup>
60 or more	116,975 <sup>(14)</sup>	22,296 <sup>(5)</sup>	41,695 <sup>(7)</sup>	62,810 <sup>(16)</sup>	44,574 <sup>(12)</sup>	2,150 <sup>(7)</sup>
All	838,685 (100)	485,351 (100)	556,370 (100)	382,721 (100)	365,436 (100)	28,936 (100)

Data are n (column %).



**Table 3. Female Genital Cancers and Precancerous Conditions for the Endometriosis Cohort**

Cancer Type or Site	Observed No.	Expected No.	Ratio of Observed to Expected	95% CI
Cervix uteri*	28	37.1	0.76	0.50–1.09
Adenocarcinoma	11	10.4	1.06	0.53–1.88
Squamous cell carcinoma	8	17.2	0.46	0.20–0.91
Other	9	9.43	0.95	0.44–1.81
Corpus uteri*	65	62.4	1.04	0.80–1.32
Endometrioid	54	50.8	1.06	0.80–1.38
Other	11	11.6	0.95	0.47–1.70
Ovary <sup>†</sup>	129	73.2	1.76	1.47–2.08
Serous	50	36.5	1.37	1.02–1.80
Mucinous	10	11.3	0.88	0.42–1.62
Endometrioid	33	10.6	3.12	2.15–4.38
Clear cell	21	4.06	5.17	3.20–7.89
Other	15	10.8	1.40	0.78–2.30
Other female genital organs <sup>‡</sup>	37	38.0	0.97	0.69–1.34
Vulva	12	16.1	0.75	0.39–1.30
Vagina	6	4.2	1.43	0.52–3.10
Others	19	17.7	1.07	0.65–1.68
Not included above <sup>§</sup>				
Cervix uteri, noninvasive neoplasms* <sup>§  </sup>	221	271.4	0.81	0.71–0.92
Borderline tumor of the ovary <sup>†§</sup>	46	35.5	1.29	0.95–1.72

Follow-up ended in death, emigration, or on December 31, 2014. The number of person-years is 838,685 (N=49,933).

\* Women who underwent hysterectomy at the primary operation were excluded; follow-up ended in hysterectomy. The number of person-years was 485,351 (n=35,372).

<sup>†</sup> Women who underwent oophorectomy at the primary operation were excluded; follow-up ended in oophorectomy. The number of person-years was 556,370 (n=36,524).

<sup>‡</sup> Neoplasms of vulva, vagina, and female genital organs of unspecified origin.

<sup>§</sup> Defined as precancerous conditions.

<sup>||</sup> In situ carcinomas from the mid-1960s, dysplasia gravis lesions since 1988 (defined as cervical intraepithelial neoplasia III 1991).

follow-up in each stratum by the cancer incidence rate in the corresponding Finnish female population. The 95% CIs for the standardized incidence ratio were based on the assumption that the number of observed cases followed a Poisson distribution. The correction for multiple testing was not used here because of the explorative character of the study.

## RESULTS

Table 2 summarizes the age distribution of the women with endometriosis at the index day and in person-years by age at follow-up. The median age at baseline was 36.4 years in the analyses without excluding women with hysterectomy or oophorectomy before the index day. Twenty-six percent of the women were younger than 30 years of age and less than 1% older than 60 years on the index day. There were 838,685 person-years of follow-up with a mean follow-up of 16.8 years. The number of person-years decreased to 485,351 when the follow-up ended with hysterectomy and to 556,370 when the follow-up ended at oophorectomy (Table 2).

The number of observed and expected cases of various gynecologic cancers for the entire cohort is shown in Table 3 and for subtypes of endometriosis in Table 4. Altogether, 259 cases of gynecologic cancer were observed, whereas the expected number was 210.7.

Endometriosis was associated with a significantly increased risk of ovarian cancer in the whole cohort (standardized incidence ratio 1.76 [95% CI 1.47–2.08]). Specifically, the risk of ovarian cancer with serous (1.37 [1.02–1.80]), endometrioid (3.12 [2.15–4.38]), and clear cell (5.17 [3.20–7.89]) histology was increased (Table 3). The standardized incidence ratio of ovarian cancer was increased in the subtype of ovarian endometriosis, especially for endometrioid (4.72 [2.75–7.56]) and clear cell (10.1 [5.50–16.9]) histology. Peritoneal endometriosis was associated with an increase in risk for the endometrioid histologic type of ovarian cancer (2.03 [1.05–3.54]) (Table 4). There was no association between deep infiltrating endometriosis and the risk of ovarian cancer.

After 5–10 years of follow-up, the risk of ovarian cancer significantly increased (Table 5). The increased standardized incidence ratio resulted mainly from the excess of endometrioid and clear cell ovarian cancer



**Table 4. Female Genital Cancers and Precancerous Stages, the Observed Number of Cancer Cases, and Their Standardized Incidence Ratios and 95% CIs According to Type of Endometriosis and Histology**

Cancer Type or Site	Type of Endometriosis								
	Ovarian (n=23,210)			Peritoneal (n=20,187)			Deep (n=2,372)		
	Observed	SIR	95% CI	Observed	SIR	95% CI	Observed	SIR	95% CI
Cervix uteri*	15	0.96	0.54–1.58	9	0.53	0.24–1.00	3	1.80	0.37–5.25
Adenocarcinoma	4	0.91	0.25–2.32	5	1.05	0.34–2.45	1	2.17	0.05–12.1
Invasive squamous cell carcinoma	4	0.55	0.15–1.41	2	0.25	0.03–0.90	2	2.75	0.33–9.93
Other	7	1.80	0.72–3.70	2	0.47	0.06–1.68	0	0.00	0.00–7.69
Corpus uteri*	33	1.12	0.77–1.57	29	1.04	0.70–1.49	1	0.74	0.02–4.12
Endometrioid	27	1.12	0.74–1.62	24	1.06	0.68–1.58	1	0.95	0.02–5.26
Other	6	1.13	0.41–2.46	5	0.96	0.31–2.24	0	0.00	0.00–12.7
Ovary†	64	2.56	1.98–3.27	54	1.32	0.99–1.72	3	1.41	0.29–4.10
Serous	20	1.62	0.99–2.49	25	1.21	0.79–1.79	2	2.05	0.25–7.41
Mucinous	5	1.29	0.42–3.01	5	0.80	0.26–1.86	0	0.00	0.00–9.58
Endometrioid	17	4.72	2.75–7.56	12	2.03	1.05–3.54	1	3.35	0.08–18.7
Clear cell	14	10.1	5.50–16.9	6	2.67	0.98–5.81	0	0.00	0.00–28.2
Other	8	2.16	0.93–4.26	6	1.02	0.37–2.21	0	0.00	0.07–10.5
Other female genital organs‡	21	1.09	0.68–1.67	12	0.78	0.40–1.36	2	0.89	0.27–8.14
Vulva	7	0.87	0.35–1.78	4	0.61	0.17–1.57	1	2.62	0.07–14.6
Vagina	4	1.92	0.52–4.90	1	0.58	0.01–3.24	0	0.00	0.00–33.6
Other	10	1.11	0.53–2.03	7	0.99	0.40–2.04	1	2.50	0.06–13.9
Not included above§									
Cervix uteri, noninvasive neoplasms*§	82	0.75	0.60–0.92	109	0.88	0.72–1.05	12	0.78	0.40–1.36
Borderline tumor of ovary*‡§	20	1.63	1.00–2.52	24	1.25	0.80–1.85	0	0.00	0.00–2.65

SIR, standardized incidence ratio.

Follow-up ended in death, emigration, or on December 31, 2014.

\* Women who underwent hysterectomy at the primary operation were excluded. Follow-up ended in hysterectomy. Ovarian endometriosis (n=15,270), 202,701 person-years; peritoneal (n=15,331), 227,676 person-years; deep (n=1,810), 19,405 person-years.

† Women who underwent oophorectomy at the primary operation were excluded. Follow-up ended in oophorectomy. Ovarian endometriosis (n=13,505), 192,257 person-years; peritoneal endometriosis (n=17,747), 298,374 person-years; and deep (n=2,058), 23,213 person-years of follow-up.

‡ Neoplasms of vulva, vagina, and female genital organs of unspecified origin.

§ Defined as precancerous conditions.

|| In situ carcinomas from the mid-1960s, dysplasia gravis lesions since 1988 (defined as cervical intraepithelial neoplasia III 1991).

risk in ovarian and peritoneal types of endometriosis. An increased standardized incidence ratio during the first 6 months of follow-up was explained by four excess cases of ovarian cancer, three within the subtype of ovarian and one within peritoneal endometriosis.

In women with ovarian endometriosis, we found no major variation in the standardized incidence ratios for endometrioid and clear cell histology of ovarian cancer according to the age at cancer diagnosis (Table 6). The increased risk of borderline tumors of the ovary concerned the cohort of ovarian endometriosis (1.63 [1.00–2.52]) (Tables 3 and 4). The standardized incidence ratio was increased only during the first half year after the diagnosis.

Endometriosis was not associated with an altered standardized incidence ratio of cervical cancer in the entire cohort nor in any of the different subtypes of endometriosis. However, a decreased standardized incidence ratio for squamous cell cervical cancer was observed in the whole cohort (0.46 [0.20–0.91]), and especially in cases of peritoneal endometriosis (0.25 [0.03–0.90]). A decreased risk was also seen for the noninvasive neoplasms of the cervix (0.81 [0.71–0.92]) among the whole cohort and in women with ovarian endometriosis (0.75 [0.60–0.92]) (Tables 3 and 4).

None of the subtypes of endometriosis differed from the female population regarding risks for endometrial cancers or other uterine cancers (Table 4) nor



**Table 5. Time From Endometriosis Diagnosis According to the Histology and Type of Endometriosis: the Number of Observed Ovarian Cancer Cases, the Standardized Incidence Ratios, and Their 95% CIs**

Histology and Time From Endometriosis Diagnosis (y)	Type of Endometriosis											
	All (n=36,524)			Ovarian (n=13,505)			Peritoneal (n=17,747)			Deep (n=2,058)		
	Observed	SIR	95% CI	Observed	SIR	95% CI	Observed	SIR	95% CI	Observed	SIR	95% CI
All												
Less than 0.5	5	4.58	1.49–10.7	3	7.40	1.53–21.6	1	1.85	0.05–10.3	0	0.00	0.00–68.8
0.5–4.9	18	1.56	0.93–2.46	8	1.90	0.82–3.74	8	1.36	0.59–2.68	0	0.00	0.00–7.03
5–9.9	20	1.30	0.79–2.00	12	2.21	1.14–3.85	8	0.98	0.42–1.93	0	0.00	0.00–5.94
10 or greater	86	1.90	1.52–2.35	41	2.75	1.97–3.73	37	1.40	0.99–1.93	3	3.21	0.66–9.36
Serous												
Less than 0.5	1	2.19	0.06–12.2	0	0.00	0.00–21.9	1	4.37	0.11–24.4	0	0.00	0.00–172
0.5–4.9	7	1.40	0.56–2.89	3	1.66	0.34–4.84	3	1.17	0.24–3.41	0	0.00	0.00–17.1
5–9.9	7	0.99	0.40–2.03	4	1.61	0.44–4.11	3	0.79	0.16–2.31	0	0.00	0.00–13.8
10 or greater	35	1.46	1.02–2.03	13	1.64	0.87–2.80	18	1.29	0.76–2.03	2	4.25	0.51–15.4
Endometrioid												
Less than 0.5	1	6.10	0.15–34.0	0	0.00	0.00–61.0	0	0.00	0.00–43.8	0	0.00	0.00–568
0.5–4.9	6	3.44	1.26–7.49	2	3.16	0.38–11.4	4	4.42	1.21–11.3	0	0.00	0.00–54.3
5–9.9	6	2.48	0.91–5.40	3	3.50	0.72–10.2	3	2.34	0.48–6.84	0	0.00	0.00–39.4
10 or greater	20	3.21	1.96–4.95	12	5.86	3.03–10.2	5	1.37	0.44–3.19	1	7.69	0.19–42.9
Clear cell												
Less than 0.5	1	29.30	0.74–163	1	73.9	1.87–411	0	0.00	0.00–241	0	0.00	0.00–1690
0.5–4.9	1	2.10	0.05–11.7	1	5.52	0.14–30.7	0	0.00	0.00–16.2	0	0.00	0.00–144
5–9.9	4	4.85	1.32–12.4	4	13.4	3.65–34.3	0	0.00	0.00–8.80	0	0.00	0.00–93.0
10 or greater	15	5.50	3.08–9.06	8	8.89	3.84–17.5	6	3.79	1.39–8.24	0	0.00	0.00–58.0

SIR, standardized incidence ratio.  
Women who underwent oophorectomy in the primary operation were excluded; follow-up ended in oophorectomy, death, emigration, or on December 31, 2014. All endometriosis person-years, 556,370; ovarian, 192,257 person-years; peritoneal, 298,374 person-years; deep, 23,213 person-years.

was endometriosis associated with risk of cancer in other female genital organs (such as the vulva or vagina).

DISCUSSION

Ovarian endometriosis was associated with an increased risk of ovarian cancer, especially that of endometrioid and clear cell histology. No increase in overall risk of ovarian cancer was evident among women with peritoneal and deep infiltrating endometriosis. The risk of endometrial cancer was unaltered, and the risk for precancerous cervical lesions and for squamous cell carcinoma of the cervix was reduced.

The strengths of this study are the nationwide cohort and the population-based registers known for their completeness and high quality.<sup>15,16</sup> Unlike many studies, we only included women with surgically verified disease, which may represent more severe endometriosis.<sup>19–21</sup> Nonetheless, 37% of our cohort had endometriosis as a subsidiary diagnosis and 21% underwent day surgeries from 1994 onward, which may represent less symptomatic forms of the disease. A weakness of this study is the almost three decades of time during which the diagnostics, treatment indications as well as medical and surgical treatments of

endometriosis have evolved greatly, which may affect the results. Moreover, testing for multiple associations may have produced some false-positive results.

The key finding was that especially ovarian endometriosis carries an increased standardized incidence ratio (2.6-fold) for ovarian cancer. Similar associations between ovarian endometriosis and ovarian cancer (two- and threefold) have been seen in two population-based studies.<sup>19,20</sup> In our study, standardized incidence ratios of endometrioid and clear cell ovarian cancer were high (three- and fivefold), and when focusing on ovarian endometriosis, standardized incidence ratios were five- and 10-fold, which is higher than previously reported.<sup>5,7,21</sup> The increase in risk started from 5 years after endometriosis surgery and from the age of 30 years onward. Previously the highest risk has been associated with long-lasting and early-onset endometriosis disease.<sup>20</sup>

Borderline ovarian tumors were also significantly elevated in our study during the first 6 months of follow-up in the subgroup of ovarian endometriosis. This is an interesting finding because the pathogenesis of endometriosis-associated cancers has been proposed to develop through borderline tumors.<sup>22</sup> We also observed a slight increase in risk for serous



**Table 6. Age at Ovarian Cancer Diagnosis According to the Histology and Type of Endometriosis: the Observed Number of Cancer Cases, Their Standardized Incidence Ratios, and 95% CIs**

Histology and Age at Ovarian Cancer (y)	Type of Endometriosis											
	All (n=36,524)			Ovarian (n=13,505)			Peritoneal (n=17,747)			Deep (n=2,058)		
	Observed	SIR	95% CI	Observed	SIR	95% CI	Observed	SIR	95%CI	Observed	SIR	95% CI
All												
20–29	0	0.00	0.00–3.18	0	0.00	0.00–9.52	0	0.00	0.00–6.19	0	0.00	0.00–47.7
30–39	13	1.69	0.90–2.88	9	3.26	1.49–6.19	4	1.02	0.28–2.61	0	0.00	0.00–9.17
40–49	46	2.05	1.50–2.73	24	3.17	2.03–4.70	16	1.28	0.73–2.08	0	0.00	0.00–5.06
50–59	47	1.76	1.29–2.34	21	2.37	1.47–3.62	24	1.56	1.00–2.31	1	1.55	0.04–8.65
60 or older	23	1.51	0.96–2.27	10	1.87	0.89–3.43	10	1.17	0.56–2.16	2	7.14	0.87–25.8
Serous												
20–29	0	0.00	0.00–11.8	0	0.00	0.00–35.3	0	0.00	0.00–22.7	0	0.00	0.00–187
30–39	4	1.33	0.36–3.40	2	1.88	0.23–6.77	2	1.28	0.15–4.61	0	0.00	0.00–25.9
40–49	14	1.39	0.76–2.33	6	1.77	0.65–3.86	5	0.88	0.29–2.06	0	0.00	0.00–12.1
50–59	19	1.36	0.82–2.13	7	1.52	0.61–3.12	11	1.37	0.68–2.44	1	2.97	0.08–16.6
60 or older	13	1.42	0.76–2.43	5	1.56	0.51–3.64	7	1.36	0.55–2.80	1	5.88	0.15–32.8
Endometrioid												
20–29	0	0.00	0.00–74.6	0	0.00	0.00–215	0	0.00	0.00–151	0	0.00	0.00–1060
30–39	4	6.02	1.64–15.4	3	12.5	2.57–36.5	1	2.99	0.08–16.7	0	0.00	0.00–104
40–49	13	3.24	1.72–5.53	6	4.41	1.62–9.59	5	2.24	0.73–5.23	0	0.00	0.00–28.2
50–59	12	2.79	1.44–4.86	6	4.19	1.54–9.10	6	2.42	0.89–5.25	0	0.00	0.00–36.8
60 or older	4	2.61	0.71–6.69	2	3.70	0.45–13.4	0	0.00	0.00–4.39	1	33.3	0.84–186
Clear cell												
20–29	0	0.00	0.00–98.4	0	0.00	0.00–266	0	0.00	0.00–229	0	0.00	0.00–995
30–39	2	9.20	1.11–33.2	2	24.5	2.96–88.3	0	0.00	0.00–36.7	0	0.00	0.00–242
40–49	8	5.15	2.22–10.2	6	11.2	4.12–24.4	2	2.39	0.29–8.62	0	0.00	0.00–60.2
50–59	10	6.50	3.12–11.9	6	11.8	4.32–25.6	3	3.38	0.70–9.87	0	0.00	0.00–98.8
60 or older	1	1.39	0.04–7.74	0	0.00	0.00–14.8	1	2.50	0.06–13.9	0	0.00	0.00–369

SIR, standardized incidence ratio.

Women who underwent oophorectomy at the primary operation were excluded; follow-up ended in oophorectomy, death, emigration, or on December 31, 2014. All endometriosis cases contributed to 556,370 person-years of follow-up: ovarian endometriosis 192,257 person-years; peritoneal 298,374 person-years; and deep 23,213 person-years of follow-up.

ovarian carcinomas (standardized incidence ratio 1.4), which is in line with a pooled analysis of case–control studies from the United States showing an association with low-grade serous carcinomas (standardized incidence ratio 2.1).<sup>7</sup>

Our study evaluated cancer risk separately for patients with peritoneal and deep infiltrating endometriosis. Previously, a small increase in risk of ovarian cancer with nonovarian endometriosis (1.5-fold) has been shown in a Swedish study.<sup>20</sup> In our study, the risk of ovarian cancer in nonovarian types of endometriosis did not differ from the overall female population. However, the peritoneal type showed a slightly increased risk of ovarian cancer with endometrioid histology (standardized incidence ratio 2.1) and with clear cell histology after 10 years of follow-up (standardized incidence ratio 3.8). Because of the infiltrative behavior of deep infiltrating endometriosis, there is a special interest to assess its associations with cancer. However, because the deep infiltrating diagnosis has been reliably used only after the mid-1990s, the cohort remained quite small (n=2,372) and the mean follow-up was only 12.2 years. Based on these

results, we conclude that the risks of gynecologic cancers associated with deep infiltrating endometriosis are not increased in the short term, but a larger cohort with longer follow-up is needed to reliably assess the risks associated with long-standing disease.

We found a strongly decreased risk of cervical cancer of squamous cell histology among women with endometriosis, especially with peritoneal endometriosis. A larger number of Pap tests may not be the explanation for this phenomenon because the risk of precancerous lesions of the cervix was also decreased. Similarly, a decreased risk of cervical cancer and the precancerous lesions has been reported previously in Sweden.<sup>20</sup> Because the main cause is human papillomavirus, one explanation might be reduced sexual activity, for example, as a result of pelvic pain, and thus lower exposure to the viruses.<sup>23,24</sup> However, more complex immunologic mechanisms may also be involved with diseases of chronic inflammation.

The risk of endometrial cancer did not differ from the population. One previous study<sup>25</sup> has reported a reduced risk of endometrial cancer (odds ratio 0.58). Other studies have found no



association,<sup>19,20,26,27</sup> or even an excess risk of endometrial cancer.<sup>21,28,29</sup>

It is important to note that even if some ovarian cancer standardized incidence ratios are high, the absolute excess risk of ovarian cancer in the whole cohort is quite small, approximately one excess case among 1,000 patients with endometriosis during 10 years of follow-up and for patients with ovarian endometriosis, approximately two cases per 1,000 patients.

## REFERENCES

- Giudice LC. Clinical practice. Endometriosis. *N Engl J Med* 2010;362:2389–98.
- Bulun SE. Endometriosis. *N Engl J Med* 2009;360:268–79.
- Vercellini P, Viganò P, Somigliana E, Fedele L. Endometriosis: pathogenesis and treatment. *Nat Rev Endocrinol* 2014;10:261–75.
- Munksgaard PS, Blaakaer J. The association between endometriosis and gynecological cancers and breast cancer: a review of epidemiological data. *Gynecol Oncol* 2011;123:157–63.
- Kim HS, Kim TH, Chung HH, Song YS. Risk and prognosis of ovarian cancer in women with endometriosis: a meta-analysis. *Br J Cancer* 2014;110:1878–90.
- Kvaskoff M, Mu F, Terry KL, Harris HR, Poole EM, Farland L, et al. Endometriosis: a high-risk population for major chronic diseases? *Hum Reprod Update* 2015;21:500–16.
- Pearce CL, Templeman C, Rossing MA, Lee A, Near AM, Webb PM, et al. Association between endometriosis and risk of histological subtypes of ovarian cancer: a pooled analysis of case-control studies. *Lancet Oncol* 2012;13:385–94.
- Merritt MA, De Pari M, Vitonis AF, Titus LJ, Cramer DW, Terry KL. Reproductive characteristics in relation to ovarian cancer risk by histologic pathways. *Hum Reprod* 2013;28:1406–17.
- Aris A. Endometriosis-associated ovarian cancer: a ten-year cohort study of women living in the Estrie Region of Quebec, Canada. *J Ovarian Res* 2010;3:2.
- Wei J, William J, Bulun S. Endometriosis and ovarian cancer: a review of clinical, pathologic, and molecular aspects. *Int J Gynecol Pathol* 2011;30:553–68.
- Fukunaga M, Nomura K, Ishikawa E, Ushigome S. Ovarian atypical endometriosis: its close association with malignant epithelial tumours. *Histopathology* 1997;30:249–55.
- Dunselman GA, Vermeulen N, Becker C, Calhaz-Jorge C, D'Hooghe T, De Bie B, et al. ESHRE guideline: management of women with endometriosis. *Hum Reprod* 2014;29:400–12.
- Saavalainen L, Tikka T, But A, Gissler M, Haukka J, Tiitinen A, et al. Trends in the incidence rate, type and treatment of surgically verified endometriosis—a nationwide cohort study. *Acta Obstet Gynecol Scand* 2018;97:59–67.
- The Finnish National Institute for Health and Welfare. Available at: <https://www.thl.fi/en/web/thlfi-en>. Retrieved December 1, 2017.
- Sund R. Quality of the Finnish Hospital Discharge Register: a systematic review. *Scand J Public Health* 2012;40:505–15.
- Pukkala E, Engholm G, Højsgaard S, Schmidt LK, Strom H, Khan S, et al. Nordic Cancer Registries—an overview of their procedures and data comparability. *Acta Oncol* 2018;57:440–55.
- The Finnish Cancer Registry. Available at: <https://cancerregistry.fi/>. Retrieved December 1, 2017.
- Luoto R, Raitanen J, Pukkala E, Anttila A. Effect of hysterectomy on incidence trends of endometrial and cervical cancer in Finland 1953–2010. *Br J Cancer* 2004;90:1756–9.
- Brinton L, Gridley G, Persson I, Baron J, Bergqvist A. Cancer risk after a hospital discharge diagnosis of endometriosis. *Obstet Gynecol* 1997;176:572–9.
- Melin A, Sparén P, Persson I, Bergqvist A. Endometriosis and the risk of cancer with special emphasis on ovarian cancer. *Hum Reprod* 2006;21:1237–42.
- Mogensen JB, Kjær SK, Møllerkjær L, Jensen A. Endometriosis and risks for ovarian, endometrial and breast cancers: a nationwide cohort study. *Gynecol Oncol* 2016;143:87–92.
- Kurman RJ, Shih IeM. The dualistic model of ovarian carcinogenesis revisited, revised, and expanded. *Am J Pathol* 2016;186:733–47.
- Fritzer N, Haas D, Oppelt P, Renner S, Hornung D, Wöelfler M, et al. More than just bad sex: sexual dysfunction and distress in patients with endometriosis. *Eur J Obstet Gynecol Reprod Biol* 2013;169:392–6.
- Montanari G, Di Donato N, Benfenati A, Giovanardi G, Zannoni L, Vicenzi C, et al. Women with deep infiltrating endometriosis: sexual satisfaction, desire, orgasm, and pelvic problem interference with sex. *J Sex Med* 2013;10:1559–66.
- Borgfeldt C, Andolf E. Cancer risk after hospital discharge diagnosis of benign ovarian cysts and endometriosis. *Acta Obstet Gynecol Scand* 2004;83:395–400.
- Rowlands IJ, Nagle CM, Spurdle AB, Webb PM; Australian National Endometrial Cancer Study Group, Australian Ovarian Cancer Study Group. Gynecological conditions and the risk of endometrial cancer. *Gynecol Oncol* 2011;123:537–41.
- Poole EM, Lin WT, Kvaskoff M, De Vivo I, Terry KL, Mismar SA. Endometriosis and risk of ovarian and endometrial cancers in a large prospective cohort of U.S. nurses. *Cancer Causes Control* 2017;28:437–45.
- Zucchetto A, Serraino D, Polesel J, Negri E, De Paoli A, Dal Maso L, et al. Hormone-related factors and gynecological conditions in relation to endometrial cancer risk. *Eur J Cancer Prev* 2009;18:316–21.
- Kok VC, Tsai H, Su C, Lee C. The risks for ovarian, endometrial, breast, colorectal, and other cancers in women with newly diagnosed endometriosis or adenomyosis: a population-based study. *Int J Gynecol Cancer* 2015;25:968–76.



# **EXHIBIT 21**

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

**IN RE JOHNSON & JOHNSON  
TALCUM POWDER PRODUCTS  
MARKETING, SALES PRACTICES, AND  
PRODUCTS LIABILITY LITIGATION**

**MDL NO. 16-2738 (MAS) (RLS)**

***THIS DOCUMENT RELATES TO:  
Rausa, et al. v. Johnson & Johnson, et al.  
3:20-cv-02947***

**SECOND AMENDED RULE 26 EXPERT REPORT OF  
DANIEL L. CLARKE-PEARSON, MD**

Date: May 28, 2024



---

Daniel L. Clarke-Pearson, MD

I am a Professor in the Department of Obstetrics and Gynecology and the Division of Gynecologic Oncology at the University of North Carolina. I am certified by the American Board of Obstetrics and Gynecology as a specialist in obstetrics and gynecology as well as a subspecialist in gynecologic oncology.

## **SUMMARY OF OPINIONS**

I was asked to provide my opinion in response to the following questions:

- (a) Can the use of talcum powder in the genital area cause epithelial ovarian cancer (EOC)? and
- (b) If so, what is the biological mechanism for this occurrence?

It is my opinion, to a reasonable degree of medical and scientific certainty, that the use of talcum powder products, including Johnson's Baby Powder and Shower to Shower, applied to the perineum of women, can cause EOC. My opinion is based on research that I have conducted in the medical and scientific literature as well as my knowledge and experience as an obstetrician-gynecologist and as a subspecialist in gynecologic oncology for over 40 years.

The increased risk associated with the genital use of talcum powder has been consistently described over decades in numerous studies. The mechanism by which talcum powder causes cancer involves: 1) ascension of particles to the fallopian tubes and ovaries; and 2) initiation of a chronic inflammatory process that includes oxidative stress and specific genetic mutations.

My opinion that genital application of talcum powder is a significant risk factor for all users and can cause epithelial ovarian cancer in some women by an accepted mechanism is strongly supported by credible scientific research. When formulating my opinions regarding causality, I considered the extensive body of literature in its totality, weighing the data and information according to its importance using the concepts outlined by Bradford Hill. The Bradford Hill factors include strength of association, consistency, specificity, temporality, biologic gradient, biologic plausibility, coherence, experiment, and analogy. These are discussed in detail later in this report.

## **QUALIFICATIONS**

The focus of my clinical practice, teaching and research for the past 40 years has been the care of women with gynecologic cancers (cancers of the ovary, fallopian tube, uterus, cervix, vagina, and vulva). In addition, I also provide care for complex gynecologic surgical problems (endometriosis, large ovarian tumors, leiomyomata).

I received a BA from Harvard College (major in biology). I spent a year as a laboratory technician developing a device to noninvasively detect deep venous thrombosis. I then attended medical school at Case Western Reserve University School of Medicine (Cleveland, OH). After graduating in 1975, I completed a four-year residency in Obstetrics and Gynecology at Duke University Medical Center (Durham, NC). I then completed a three-year fellowship in Gynecologic Oncology at Duke. From 1982-1985, I was an assistant professor on the Duke faculty (Division of Gynecologic Oncology). From 1985-1987, I was the Director of Gynecology and Gynecologic

Oncology at the University of Illinois (Chicago, IL). I returned to Duke in 1987 to serve as the Director of Gynecologic Oncology and Director of the Gynecologic Oncology Fellowship program. I was appointed a full professor with tenure and was awarded a Distinguished Professorship (James Ingram Professor of Gynecologic Oncology) in 1993.

From 2005 until 2019, I served as Chair of the Department of Obstetrics and Gynecology at the University of North Carolina (Chapel Hill, NC). As the Robert A. Ross Distinguished Professor and Chair, I had administrative responsibilities for over 75 faculty, 28 residents in obstetrics and gynecology and 29 fellows receiving subspecialty training in eight subspecialties. Throughout my career, I provided clinical care to women with gynecologic cancers including surgery, administration of chemotherapy, and conducting clinical trials. Currently, I have a part-time position in the department and continue to educate medical students and residents in Obstetrics and Gynecology and Fellows in Gynecologic Oncology.

I have published over 250 peer-reviewed manuscripts in the medical literature. I have also written over 50 chapters for medical textbooks and edited three medical textbooks. My research has focused on the treatment of gynecologic cancers, surgical techniques, and the prevention of venous thromboembolic (VTE) disease. I have conducted the practice defining clinical trials evaluating various methods to prevent VTE in gynecologic surgery.

I have served on the editorial boards of four peer-review journals (*Obstetrics and Gynecology*, *Journal of Gynecologic Techniques*, *Journal of Gynecologic Surgery* and *Gynecologic Oncology*). I served as a board examiner for the American Board of Obstetrics and Gynecology for eighteen years. I have been actively involved with relevant medical organizations including the American College of Obstetricians and Gynecologists (ACOG), the Society of Gynecologic Oncology (SGO), the American College of Surgeons (ACS) and the Gynecologic Oncology Group (GOG). I have led numerous postgraduate continuing education courses sponsored by ACOG. Most have focused on teaching obstetricians and gynecologists complex pelvic surgery and management (and prevention) of surgical complications. I have served on several ACOG committees (Technical Bulletins, Gynecologic Management and Grievance) and was the chair of the Gynecologic Management Committee that wrote Clinical Opinions distributed to ACOG members. I also served a three-year term on the ACOG Executive Board. As a gynecologic oncologist, I have been an active member of the SGO and have served on a number of SGO Committees and the Executive Board. In 2010, I was the SGO President. As a member of the American College of Surgeons, I have presented CME lectures at the ACS annual meeting and have served on the ACS Obstetrics and Gynecology Advisory Committee and the Commission on Cancer. The GOG is a cooperative group organization sponsored by the National Cancer Institute to conduct clinical trials investigating new treatments to improve the outcomes of women with gynecologic cancers. Many of the publications on my CV (Exhibit A) derive from participation in these clinical trials.

I am a past member of the SGO Ethics Committee, past President of the Council of University Chairs of Ob Gyn (CUCOG), and currently serve as the President-Elect of the Society of Pelvic Surgeons.

My updated *curriculum vitae* is attached as **Exhibit A**.

## **METHODOLOGY AND MATERIALS REVIEWED**

Specifically, in preparing this report, I sought to obtain relevant information through several sources. I primarily relied on a PubMed search of “talc AND Ovarian Cancer”, “Ovarian Cancer AND risk factors”, “Talcum Powder AND Ovarian Cancer”, “Talcum Powder AND Cancer”, “Talc AND Cancer”, “Asbestos AND Ovarian Cancer”, “Asbestos AND Cancer”. These searches provided peer-reviewed papers that included original research, case-controlled studies, cohort studies, meta-analysis studies, and review papers and systematic analysis. I also searched some of the references cited in these papers. Google searches were also performed. I also reviewed a number of textbooks searching for “ovarian cancer risk factors” and “talc/talcum powder”. In addition to the literature derived from these searches, I received relevant materials at my request to clarify a particular topic or answer a question. I approached this research with the same scientific rigor that I would use in my own clinical, academic, and research practice.

I assessed the data and conclusions of these peer-reviewed articles considering the strengths and weaknesses of each particular study. The medical and scientific literature on these topics varies in the quality of the study design and, at times, in conclusions. I approached each article objectively and critically, assessing for factors such as design, power, reputation of author(s), quality of journal, and potential biases. The increased risk associated with the genital use of talcum powder is consistently described over decades.

When formulating my opinions regarding causality, I considered the extensive body of literature in its totality, weighing the data and information according to its importance using the concepts outlined by Bradford Hill. Overall, I believe that the opinions expressed in this report are strongly supported by credible scientific research. The complete list of the materials I considered is attached as **Exhibit B**.

## **BACKGROUND AND OPINIONS**

### **a) Overview of Ovarian Cancer**

Approximately 20,000 women in the US will be diagnosed with ovarian cancer annually. To date, there is no method to screen for ovarian cancer and symptoms associated with ovarian cancer are vague and not specific. Therefore, at the time of initial diagnosis, nearly 75% of women will have ovarian cancer spread throughout the abdominal cavity, lymph nodes and into the lung (pleural effusion). Current treatment includes initial surgery to attempt to remove the bulk of the cancer (“debulking surgery”) followed by treatment with multi-agent chemotherapy. Unfortunately, the majority of women will ultimately die from this malignancy.

Ovarian cancer refers to a group of malignancies found in the ovary. These groups are determined based on the ovarian cells from which they arise – germ cell, stromal, and epithelial cancers. Epithelial ovarian cancers (EOC) involve the cells on the surface of the ovary and can originate in either the ovary or fallopian tube. These account for the vast majority of ovarian cancers (greater than 90%). EOC are further subdivided based on the microscopic characteristics of the cells. These subtypes include serous, endometrioid, clear cell, mucinous, undifferentiated, or mixed. Of these, serous is by far the most common at approximately 70% of EOCs.

## **b) Pathogenesis of Ovarian Cancer**

There are several theories as to the origin of ovarian cancer. One holds that “incessant ovulation” requires “repair” of the ovarian surface epithelium after each ovulation. The “repair” mechanism is prone to generate DNA errors (mutations) that result in malignant transformation. (Fathalla 1971). This theory is supported by observations that events that reduce ovulation are associated with a lower risk of a woman developing ovarian cancer. Pregnancy, breast feeding, and use of oral contraceptives all reduce the risk of ovarian cancer. (Havrilesky et al. 2013; La Vecchia 2017).

Before 2008, it was presumed two other cancers in women (fallopian tube and primary peritoneal) were distinct from ovarian cancer. However, Levanon recognized that many EOCs actually arise in the fallopian tube and metastasize to the ovary and peritoneal cavity. (Levanon, Crum, and Drapkin 2008). This observation is supported by molecular data (especially the frequent finding of P53 mutations in the fallopian tube and EOC metastases). (Fathalla et al. 2013; Kurman and Shih 2016; Dubeau and Drapkin 2013; Chien et al. 2015). Today, we believe that EOC, fallopian tube carcinoma and primary peritoneal carcinoma are the same entity and share similar risk factors and pathogenesis.

By definition, cancer results from gene mutations in normal cells that transform the normal cell into a cell that has lost its regulation of controlled growth. Mutations can occur through a number of processes. Some mutations may be inherited from either the patient’s mother or father. BRCA1, BRCA2 and mismatch repair gene (Lynch Syndrome) mutations are such examples. In most instances, the mutations occur due to exposures such as virus (HPV virus causing cervical, anal, vulvar and oropharyngeal cancers), tobacco smoking (lung cancer) and exposure to x-rays (leukemia). Some exposures result in a chronic inflammatory response that induces mutations as the normal cell attempts to repair damage such as that caused by asbestos (pulmonary mesothelioma, ovarian cancer). These mutations can also occur spontaneously as cells (and individuals) age. (Bottazzi, Riboli, and Mantovani 2018).

## **c) Inflammation and Cancer**

There is a clear link between inflammation (resulting in oxidative stress) and cancer risk. This is true for many types of cancers, including stomach, colon, cervix, mesothelioma, pancreas, and liver, as well as ovary. (Balkwill and Mantovani 2001; Coussens and Werb 2002; Okada 2007; Reuter et al. 2010; Crusz and Balkwill 2015; Fernandes 2015). Inflammation causes cancer through promoting cell proliferation, oxidative stress, DNA damage and gene mutations. This process is associated with many steps in the genesis of cancers including initiation, progression, metastases and chemoresistance.

Both inflammatory cells and cancers produce cytokines and chemokines that contribute to cancer growth and spread. Cytokines, particularly TNF-alpha and IL-1 beta, generate reactive oxygen species (ROS) and reactive nitrogen species (RNS). These are potent mutagens and are comparable to the cell damage caused by ionizing radiation. (Yan et al. 2006). These ROS radicals cause DNA breaks and DNA adducts. The inflammation cascade has been shown to occur in the pathogenesis of EOC. (Shan and Liu 2009; Saed, Diamond, and Fletcher 2017; Khan et al. 2011; Saed et al. 2018; Trabert et al. 2014; Savant et al. 2018; Ding et al. (2021)). Fletcher and Saed exposed normal

ovarian cells and EOC cells to talcum powder and demonstrated significant cellular effects including oxidative stress, cell proliferation, decreased apoptosis, and enzymatic activity corresponding to single nucleotide polymorphisms (SNPs) associated with inflammation and ovarian cancer. (Harper et al. 2019). Recently, Harper and Saed also demonstrated that exposure to Johnson's Baby Powder causes p53 mutations, cell proliferation and malignant transformation in normal ovarian epithelial cells. (Harper et al. 2023).

Talcum powder is known to elicit an inflammatory response in animals and humans. (Eberl and George 1948; Radic et al. 1988; NTP Toxicology and Carcinogenesis Studies of Talc (CAS No. 14807-96-6) (NonAsbestiform) in F344/N.Rats and B6C3F1 Mice (Inhalation Studies) 1993). Shukla demonstrated *in vitro* that crocidolite asbestos and non-fibrous (platy) talc caused expression of genes in ovarian epithelial cells producing inflammatory cytokines. (Shukla et al. 2009). Gates documented absence of some DNA repair mechanisms in patients who were genital talcum powder exposed when compared to controls in the New England Case Control Study. (Gates et al. 2008). In another series of *in vitro* experiments, Buz'Zard transformed normal ovarian epithelial cells to malignant cells by talc exposure. (Buz'Zard and Lau 2007). Akhtar et al. (2010, 2012) also demonstrated oxidative stress in cells exposed to talc particles. Yan and Kahn have demonstrated similar findings in their laboratories. (Yan et al. 2006; Khan et al. 2011). In 2020, Mandarino demonstrated that talc, especially in combination with estradiol, stimulated macrophages to produce increased reactive oxygen species and changes in gene expression that could promote a pro-tumorigenic environment. (Mandarino et al. 2020). In 2021, Emi et al. conducted a follow-up study which found that the "pathway affected by talc included cell proliferation, immune responses, and signaling, immunosurveillance, apoptosis." (Emi et al. 2021). These studies provide evidence of chronic inflammation in animals and cells when exposed to talcum powder and support the findings of experiments with Johnson's Baby Powder. (Fletcher et al. 2019).

#### **d) EOC Risk Factors**

Inherited mutations such as BRCA1 and BRCA 2 are the most significant risk factors for epithelial ovarian cancer. The lifetime risk of developing ovarian cancer is 39-46% in BRCA1 carriers and 11-27% in women with BRCA 2 mutation. (Ring et al. 2017). This is compared to 1.3% lifetime risk in non-carriers. Mutations in BRCA1 and BRCA2 make up 75% of all hereditary ovarian cancers, but only account for 10-15% of all EOC. (Lancaster 2015).

Women with hereditary risk are also affected by genetic modifiers, including nongenetic and environmental factors. (Levy-Lahad 2007). Environmental factors would include exposure to talcum powder and asbestos.

Additional risk factors, both nonmodifiable and modifiable, include increasing age, family history of ovarian or breast cancer, nulliparity, early menarche or late menopause, high fat diet, infertility, endometriosis, polycystic ovarian syndrome, hormone replacement therapy, IUD use, history of pelvic inflammatory disease, obesity, and genital use of talcum powder. (Hunn and Rodriguez 2012; Mallen, Townsend, and Tworoger 2018; Park et al. 2018; Folkins et al. 2018; IOM 2016; Lheureux 2019; Phung et al. 2022). Ovarian cancer is often multifactorial; risk factors can be cumulative and synergistic. (Vitonis 2011; Wu 2018).

Multiparity, breast feeding, oral contraceptive use, tubal ligation, salpingoophorectomy, and hysterectomy (without salpingoophorectomy) reduce the risk of developing EOC. (Hunn and Rodriguez 2012; Mallen, Townsend, and Tworoger 2018; Park et al. 2018; Folkins et al. 2018).

**e) Talcum Powder, Asbestos and other carcinogens**

During my postgraduate (residency) training (1975-1979) in obstetrics and gynecology it was reported that talc had been identified deeply imbedded in ovarian cancer tissue samples (Henderson 1971) and raised questions about the association between talcum powder and asbestos. In subsequent studies, Henderson confirmed that these findings did not represent surface contamination. (Henderson et al. 1974; Henderson et al. 1979). It seemed plausible that asbestos (a known carcinogen) could be an EOC risk factor. However, we were taught that asbestos had been removed from talcum powder in the production process.

As a young gynecologic oncologist, it was reassuring to learn that asbestos was no longer contained in talcum powder because we knew that asbestos was a potent carcinogen. IARC monograph 100c (2012) clearly summarizes the evidence associating asbestos to mesothelioma and cancer of the lung, larynx, and ovary. Experimental models demonstrate sufficient evidence for the carcinogenicity of all forms of asbestos (chrysotile, crocidolite, amosite, tremolite, actinolite and anthophyllite) and that all forms, as well as talc containing asbestiform fibers, are carcinogenic to humans. Specifically addressing the increased risk of EOC in women exposed to asbestos in occupational settings, there are at least five cohort mortality studies (Acheson et al. 1982; Wignall and Fox 1982; Germani et al. 1999; Berry, Newhouse, and Wagner 2000; Magnani et al. 2008), two population-based cohort studies (Vasama-Neuvonen et al. 1999; Pukkala et al. 2009) and a case control study (Langseth and Kjaerheim 2004) showing a causal association between exposure to asbestos and ovarian cancer.

In the late 1970s concerns that talc could be associated with EOC were expressed by Woodruff and Longo. (Woodruff 1979). The hypothesis suggested that talc applied to the perineum (vulva) ascends to the vagina and then into the uterus and through the fallopian tubes to implant on the ovary and other peritoneal surfaces. This foreign body was known to create a potent inflammatory reaction when found in the lungs, pleural cavity and peritoneal cavity. In fact, as gynecologic surgeons, we were taught to wash the talcum powder off of our surgical gloves before opening the abdomen to prevent inflammatory reactions and adhesions.

In 1982, a case-control study was the first epidemiologic study alerting the medical community of the possible association of talc use and EOC. (Cramer et al. 1982). Cramer compared women who did and did not use talc in their perineal hygiene. Regular use of talc was found to be associated with an increased occurrence of EOC by 92% (OR of 1.92., 95% confidence interval: 1.27-2.89). Cramer wrote, "It is not clear whether this derives from the asbestos content of talc or from the uniqueness of the ovary which might make it susceptible to carcinogenesis from both talc and other particulates."

Talcum powder also contains other carcinogens including asbestos, talc containing asbestiform fibers (fibrous talc), heavy metals such as nickel, chromium and cobalt (possible 2b), and other

inflammatory agents, toxins, and carcinogens contained in the fragrance chemicals in talcum powder. (Expert Report of Longo and Rigler 2019; Exhibit 28, Deposition of John Hopkins, Ph.D., MDL No. 2378, 2018; Exhibit 47, Deposition of Julie Pier, MDL No. 2738, 2018; Expert Report of Michael Crowley, Ph.D., MDL No. 2738, 2018). In the analysis of historical samples of J&J talcum powder products performed by Drs. Longo and Rigler, asbestos was present in the majority of samples with fibrous talc (talc fibers) seen in virtually all bottles tested. (Longo and Rigler report). In October 2019, FDA found asbestos in a sample of Johnson's Baby Powder purchased online, resulting in Johnson & Johnson recalling one lot of the product – 33,000 bottles. (BMJ 2019).

Fibrous talc (synonymous with talc in an asbestiform habit, asbestiform talc, or talc fibers) and all forms of asbestos are recognized by IARC as carcinogenic to humans, including ovarian cancer. (IARC 2012). According to IARC, consumer products are the primary sources of talc for the general population (non-occupational). Inhalation and perineal application and migration of talcum powders are the primary routes of exposure. (IARC 2012). The carcinogenicity of asbestos and other mineral fibers involves inflammation, oxidative stress, DNA damage and mutation, inducement of cell proliferation and transformation, and resistance to apoptosis. (IARC 2012, Moller 2013, Mossman 2018, Egilman 2019).

#### **f) Epidemiology Studies**

The association of talcum powder and EOC is based on several types of epidemiologic studies. Of course, a randomized controlled double-blinded trial would be more conclusive. However, a randomized trial would be unethical given the evidence that talcum powder causes EOC.

When looking at these epidemiologic studies in their totality, the data shows a consistent, statistically significant increased risk of developing EOC with perineal talcum powder use. Overall, the risk is increased 20-60% when compared with women who did not use talcum powder.

The original case control study published by Cramer et al. in 1982 evaluated the use of perineal talcum powder in 215 white women with EOC (29 cases were "borderline" or ovarian cancer of low malignant potential). These women with EOC were matched by race, age and residence to 215 women in the same community. Talc exposure from surgical gloves, diaphragm use, and perineal use was ascertained. Talc was used by 42.8% of women with EOC and only 28.4% of women who did not have EOC. Any perineal talc exposure showed a statistically significant relative risk of 1.92 (95% confidence limits 1.27-2.89), equivalent to a 92% increased chance of developing EOC. (Cramer et al. 1982).

Subsequently, there have been at least 24 other case-control studies looking at the association of talc and EOC. Overall, the case-control studies show a 30-40% increased risk of EOC associated with genital talcum powder use. These individual studies vary in size and quality, and I weighted them accordingly. Three recent case-control studies replicated previous studies showing an increased risk of EOC in women using perineal talcum powder. Wu evaluated 1701 Californian women with EOC and found talc significantly increased the risk of EOC by 40% in whites, 20% in Hispanics and 56% in African Americans. (Wu et al. 2015). Owing to the small number of

African American women in this study, the findings were not statistically significant.

Subsequently, the National Cancer Institute sponsored a multi-center study of African American women and found a 44% increase in EOC associated with talc use. A dose-response was also found for duration of use and number of lifetime applications ( $p < .05$ ). (Schildkraut et al. 2016). Cramer performed a case control study (with additional pooled data) in 2016 that included nearly 4,000 women with EOC finding an elevated EOC risk of 33% (OR 1.33, 95% CI 1.16, 1.52). Risk increased with frequency and duration of use. (Cramer et al. 2016).

I also reviewed four cohort studies (Gertig, Gates, Houghton, Gonzalez). While not addressing talcum powder usage as the primary research question, these studies also reported the relationship between powder usage and ovarian cancer. The Gertig study showed a statistically significant increased risk of serous epithelial ovarian cancer with talcum powder users. However, I found these studies to have significant limitations due to defective trial design and reporting of their data.

Recently, O'Brien et al. published a pooled study of the data from four cohort studies. The authors concluded that there was not a statistically significant association between the genital use of powder and an increased risk of ovarian cancer. (O'Brien et al. 2020). However, closer examination of the data indicates a significant increased risk in women with an intact reproductive tract. Additional criticisms of the paper are outlined in Letters to the Editor (from Drs. Cramer, Harlow, Murray, and Rothman) and include the possibility of the study being underpowered, the discordance between the findings and conclusions of the authors, the lack of consistency among the cohort inquiries, and the failure to take into account the age and menopausal status of the subjects. (O'Brien et al. 2020; Gossett 2020; Letters to Editor JAMA 2020).

While case-control studies and cohort studies are compelling, in my opinion, meta-analysis studies are much stronger in that they include larger numbers of patients resulting in greater statistical power. I reviewed eight meta-analyses, one pooled study (Terry) and one cohort-only pooled study (O'Brien) reported between 1995 and 2022. All of these studies, with the exception of O'Brien, report a statistically significant increased risk of EOC in women who use talcum powder in the genital area.

Penninkilampi reported that there was a further increase in EOC in women who used talcum powder more frequently. In those who had greater than 3,600 lifetime applications the odds ratio increased to 1.42 (OR 1.42; 95% CI 1.25-1.61) when compared with women who used < 3,600 applications (OR 1.32; 95% CI 1.15-1.50). In this study, talcum powder use was associated with an increased incidence of endometrioid and serous EOC but not mucinous or clear cell types. (Penninkilampi and Eslick 2018). These results were similar to the meta-analysis conducted by Berge et al. (2018), summary relative risk 1.22 (95% CI: 1.13–1.30).

The Taher meta-analysis was commissioned by Health Canada and formed the epidemiological basis for its assessment of the risks of cosmetic talc (non-asbestos containing). Health Canada performed an extensive review of the subject that included a Bradford-Hill analysis and concluded: **“With regards to perineal exposure, analyses of the available human studies in the peer-reviewed literature indicate a consistent and statistically significant positive association between perineal exposure to talc and ovarian cancer.** The available data are indicative of a

causal effect. Given that there is potential for perineal exposure to talc from the use of certain self-care products (e.g., body powder, baby powder, diaper and rash creams, genital antiperspirants and deodorants, body wipes, bath bombs, bubble bath), a potential concern for human health has been identified.” (Health Canada Assessment 2021).

In a recent meta-analysis by Davis, et al. (2021), data from five studies in the Ovarian Cancer in Women of African Ancestry Consortium were considered. Participants included 620 African-American ovarian cancer cases and 2,800 white cases, and 1,146 African-American controls and 6,735 white controls who answered questions on genital powder use prior to 2014. For all cases with frequency of use > once per week, there was an increased risk of 1.31 (95% CI 1.15-1.48), with an odds ratio of 1.31 (95% CI 1.13-1.52) for high-grade serous and 1.29 (95% CI 1.09-1.54) for all other histotypes. The authors concluded that “the associations between genital powder use and ovarian cancer risk were similar across race and did not materially vary by histotype.”

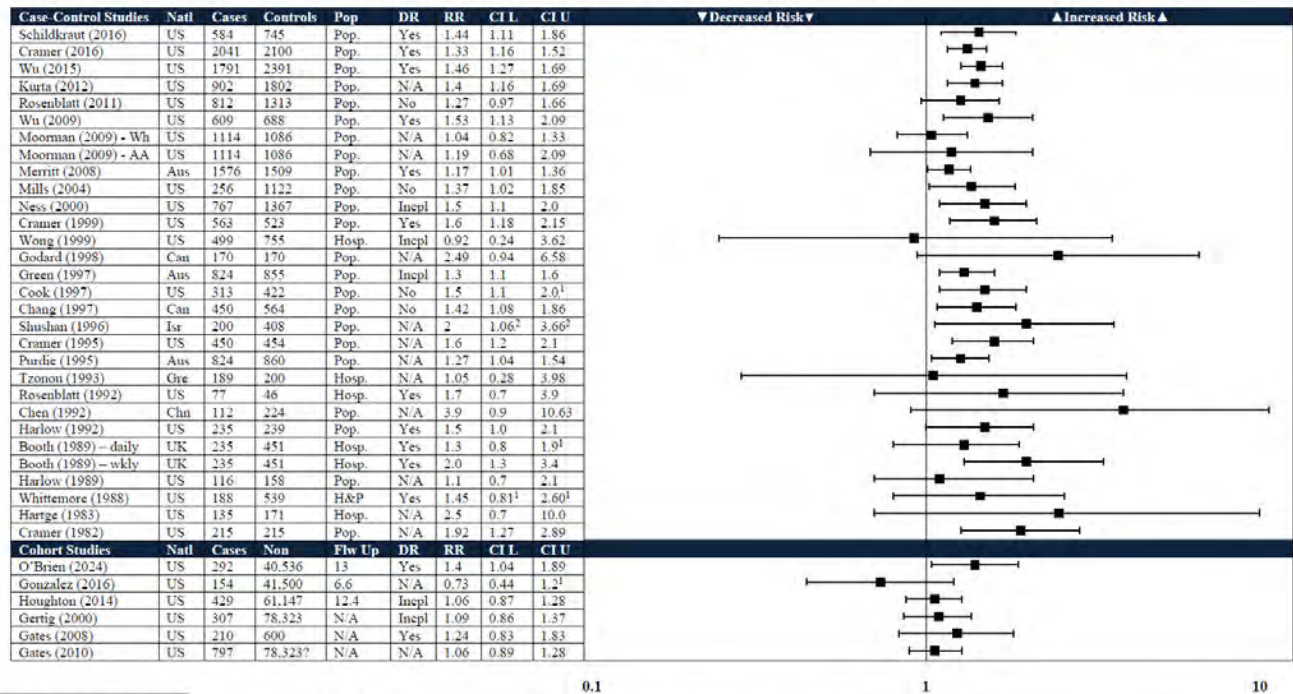
In a study performed by the Ovarian Cancer Association Consortium, the data of 9 case-controlled studies were pooled to consider the effect of well-established ovarian cancer risk factors in women with endometriosis and without endometriosis. The pooled analysis included 8500 women with ovarian cancer and 13,592 controls. For women with endometriosis, an inflammatory process, the increased risk of ovarian cancer with genital talc use was 38% (OR 1.38, 95% CI 1.04-1.84); for women without endometriosis, the increased risk was 12% (OR 1.12, 95% CI 1.01-1.25). (Phung et al. 2022).

Woolen, et al. (2022) conducted a systematic review and meta-analysis of eleven studies, focusing on frequent use of genital talc which was defined as  $\geq 2$  times per week. “Frequent talcum powder use was associated with an elevated risk of ovarian cancer (adjusted pooled summary odds ratio 1.47 (95% CI 1.31, 1.65,  $P < 0.0001$ ).”

With new data from the Sister Study, O’Brien, et al. (2024) published a study showing “in models adjusted for exposure misclassification, genital talc use was positively associated with ovarian cancer (HR range, 1.17-3.34).” Women who used talc frequently had an increased risk of 1.81 (1.29 to 2.53), and women who used genital talc long-term ( $\geq 2$  decades) had an increased risk of 2.01 (1.39 to 2.91). Genital use of talcum powder by women during their 20s resulted in an increased risk of 1.88 (1.37 to 2.57) and for those women who used in their 30s, 2.08 (1.50 to 2.89). For these data points, the study found an increased risk of ovarian cancer with and without correction for recall bias.

In summary, when evaluating all epidemiological studies, there is a consistent and statistically significant increased risk of developing EOC with perineal talcum powder use. Data from the case control, cohort, meta-analysis, and pooled studies are shown in the following forest plots prepared at the direction of Dr. Anne McTiernan:

Figure 2: Case-Control and Cohort Studies

<sup>1</sup> Corrected data-point from study text (report figure: Cook 1997 CI Upper 2.3; Gonzalez CI Upper 1.21; Booth 1989 CI Upper 1.0; Whittemore CI p=0.06).<sup>2</sup> Corrected data-point from defense expert report(s) (report figure: p=0.04).

### Meta-Analyses and Pooled Studies (All Ovarian)

Meta-Analyses	Studies	Cases	DR	RR	CI L	CI U	▼ Decreased Risk ▼	▲ Increased Risk ▲
Woolen (2022)	11	6542	Yes	1.47	1.31	1.65		
Taher (2018)	27	17,149	Yes	1.28	1.2	1.37		
Penninkilampi (2018)	27	14,311	Yes	1.31	1.24	1.39		
Berge (2018)	27	N/A <sup>1</sup>	Yes	1.22	1.13	1.3		
Langseth (2008)	20	N/A <sup>1</sup>	N/A	1.35	1.26	1.46		
Huncharek (2003)	16	5260	No <sup>2</sup>	1.33	1.16	1.45		
Cramer (1999)	14	3834	N/A	1.4	1.2	1.5		
Gross (1995)	10 <sup>3</sup>	1509	N/A	1.29	1.02	1.63		
Harlow (1992)	6	1106	N/A	1.3	1.1	1.6		
Pooled Meta-Analyses	Studies	Cases	DR	RR	CI L	CI U		
Terry (2013)	8	8,525	Yes	1.24	1.15	1.33		
O'Brien (2020)	4	2168	No	1.08	0.99	1.17		
↳ Patent Reproductive Tract	4	1384	Yes	1.13	1.01	1.26		
Davis (2021)	5	AA:620	No	1.22	0.97	1.53		
		Wh:2800		1.36	1.19	1.57		

0.5

1

2

**g) Migration and transport of talc particles to the ovaries and other pelvic organs**

How is it possible for cosmetic talcum powder, applied to the perineum, to reach the fallopian tube and ovary and cause an inflammatory response that could result in malignant transformation?

As compared to males, the female reproductive tract is open and allows migration of potential pathogens into the peritoneal cavity. The female reproductive tract is in continuity between the peritoneal cavity and the external environment. For example, an ovum extruded from the ovary (an intraperitoneal organ) can progress down the fallopian tube to the uterine cavity, implant and result in a pregnancy that delivers vaginally. The converse is also obvious. It is clearly recognized that sperm (including sperm and sperm particles which would be non-motile) ascend from the vagina through the uterus and into the fallopian tube and into the peritoneal cavity. (Jones and Lopez 2006). Sexually transmitted bacterial infections (for example, gonorrhea and chlamydia) ascend from the vagina to the tube and ovary resulting in pelvic inflammatory disease and tubo-ovarian abscesses. While sperm and bacteria are “motile”, non-motile substances have been demonstrated to ascend from the vagina to the peritoneal cavity. As far back as 1961, Egli demonstrated that carbon particles placed in the posterior vaginal fornix were observed in the fallopian tubes within less than one hour in two of three patients tested. (Egli and Newton 1961). Venter and Iturralde placed albumin microspheres labelled with 99mTc into the vagina. (Venter and Iturralde 1979). During pelvic surgery the following day, radioactive levels were found in the tubes and ovaries in nine of 14 cases. Sjösten conducted a trial that showed that powder on gloves used to perform a gynecologic exam resulted in powder detected in the peritoneal fluid, tubes and ovaries one day after the examination. (Sjösten, Ellis, and Edelstam 2004). Likewise, talc has been detected on the ovaries following surgical oophorectomy. (Henderson et al. 1971; Heller, Gordon, et al. 1996; Heller, Westhoff, et al. 1996). In a recent study using correlative light and scanning electron microscopy, morphologically demonstrated talc particles were found in multiple pelvic organ sites, including pelvic tissues and lymph nodes simultaneously. (McDonald 2019). Talc particles and fibers found in pelvic tissues have been shown to be similar to those found in cosmetic talcum powder products, further supporting migration and transport to pelvic organs. (Johnson 2020).

I reviewed the small body of literature suggesting that migration of particles does not occur and do not think these studies are compelling.

I believe that ascension of talcum powder and its constituents through the genital tract is the most important route of exposure. However, inhalation is another plausible mechanism. (IARC 2012; Steiling et al. 2018, Steffen et al. 2020; Health Canada 2021). With either route, at least some of the talcum powder components are likely to be absorbed into the lymphatic system and bloodstream, representing another mechanism for exposure to internal organs.

**CAUSATION ANALYSIS**

In my opinion, genital application of talcum powder is a significant risk factor for all users and can cause epithelial ovarian cancer in some women by an accepted mechanism. As an academic and practicing physician, I made this determination in the context of Bradford Hill considerations as follow:

**Strength and consistency:** This opinion is supported by overwhelming epidemiologic evidence showing that the genital use of talcum powder statistically increases a woman's risk of developing EOC by approximately 30 percent (OR 1.31 Penninkilampi 2018; OR 1.28 Taher et al. 2019; OR 1.31 Davis et al. 2021). For frequent users of talcum powder, the risk is higher (e.g., Woolen et al. 2022; O'Brien et al. 2024). All previous meta-analyses reported similar increases in the risk of developing EOC with the use of talcum powder. In my view, especially when considering the severity and frequency of ovarian cancer and the preventable nature of talcum powder usage, this finding is critically important and consistently supported by numerous studies.

**Specificity:** Based on the epidemiologic studies cited in this report, there appears to be a specific ovarian cancer caused by talcum powder: epithelial ovarian cancer (EOC). Other reproductive cancers do not appear to have an association. This association satisfies this consideration, although I did not weigh this factor to be as important as strength and consistency.

**Temporality:** In many cancers where there are identified etiologic agents (smoking and lung cancer, HPV infection and cervical cancer) there is a latency period (time from exposure to the onset of the cancer) that can extend over decades. (Nadler and Zurbenko 2014). This concept applies to the latency period of talcum powder use before a woman develops ovarian cancer, thus fulfilling this consideration.

**Biologic Gradient/Dose-response:** Measuring the "dose" of talcum powder used by an individual woman is difficult to ascertain and has been dependent on recall by the woman. In general, studies have attempted to capture the application "frequency" (daily? Only used on perineal pads during menstrual cycle?) or duration of use (how many years?). In addition, biologic gradient or dose-response is not always linear (e.g., asbestos exposure and mesothelioma is generally thought to have a "threshold response"). A number of studies have demonstrated an association between "dose" and the occurrence of EOC (response). (Terry et al. 2013; Schildkraut et al. 2016; Daniel W. Cramer et al. 2016; Penninkilampi and Eslick 2018; Woolen et al. 2022). More recently, *in vitro* studies have demonstrated a dose dependent effect of talcum powder on molecular changes associated with carcinogenesis. (Fletcher et al. 2019; Mandarino et al. 2020).

**Plausibility:** This is obviously a critical factor when forming opinions on causation of a risk factor. Evidence shows that talcum powder ascends from the perineum through the vagina, cervix and uterus into the fallopian tubes and onto the ovary. Talcum powder is known to be an agent that causes inflammation. An inflammatory reaction caused by talcum powder on the tube and surface of the ovary results in genetic mutations and carcinogenesis. Talcum powder causes ovarian cancer through this mechanism. The "talcum powder agent" includes numerous constituents such as platy talc, asbestos, fibrous talc, heavy metals and/or chemicals contained in fragrances added to talcum powder, all of which cause an inflammatory reaction leading to carcinogenesis.

**Coherence:** Epidemiological data, *in vitro* and *in vivo* research are consistent in explaining the pathogenesis of EOC through the inflammatory mechanisms described above. (Saed, Diamond, and Fletcher 2017; Savant et al. 2018; Ding et al. 2021). Further, this is consistent with the causes of other cancers.

**Experiment:** There are no randomized trials comparing outcomes of women who use or who do not use talcum powder in their perineal hygiene. Further, such a trial at this point in time would be unethical. How could we expose women to talcum powder when the existing evidence supports causation of EOC? Laboratory research (*in vitro*) present evidence to support the biologic, genetic, epigenetic and neoplastic consequence to ovarian epithelium when exposed to talcum powder. (Buz'Zard and Lau 2007; Shukla et al. 2009; Akhtar et al. 2010; Akhtar et al. 2012; Fletcher et al. 2019; Mandarino et al. 2019; Emi et al. 2021; Harper et al. 2023).

**Analogy:** There are numerous reports in the medical literature of minerals similar to talc causing cancer. Probably the most significant example is asbestos and lung cancer (mesothelioma).

## CONCLUSION

It is my opinion, based on research that I have conducted in the medical and scientific literature as well as my knowledge and experience as an obstetrician-gynecologist and as a subspecialist in gynecologic oncology for over 40 years, that the use of talcum powder products including Johnson's Baby Powder and Shower to Shower, applied to the genital area of women, can cause EOC. The mechanism by which talcum powder causes cancer involves: 1) ascension of particles to the fallopian tubes and ovaries and 2) initiation of an inflammatory process that includes oxidative stress and specific genetic mutations. The additional studies that have been published and I have considered since my prior report reaffirm my opinion that the genital use of talcum powder can cause ovarian cancer.

These opinions are made to a reasonable degree of medical and scientific certainty.

I reserve the right to supplement or amend this report if new information becomes available. I reserve the right to review and remark on the reports and testimony of Defendants' experts. My prior testimony is attached as **Exhibit C**.

**Pasqualina Rausa: Brief Medical History**  
**DOB [REDACTED] 1955**

### Initial Presentation:

In February 2018, Ms. Pasqualina Rausa, then 62 years old,

Past Medical History:

**Past Surgical History:**

**Allergies:**

### Family History:

**Tobacco Use:**

**Social History:** Retired. Social use of alcohol. Patient is married.

OB/GYN Hx:

Physical exam:

Pelvic Exam:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Laboratory evaluation included:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Staging Procedure:**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Pathology:**

[REDACTED]

**Postoperative treatment:**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### **Pasqualina Rausa: Case-specific opinions**

I reviewed the available medical records, Plaintiff Profile Form (PPF), deposition testimony, and Dr. Godleski's expert report in considering my opinion regarding causation in this case. My opinions are based on my education, training, and experience, as well as the general causation facts and opinions outlined above. After completing my review, it is my opinion that Ms. Rausa's use of talcum powder products on her body, including her genital area, is a substantial contributing cause of her ovarian cancer.

Ms. Rausa was found to have a Stage IIIa high grade serous carcinoma of the ovary. She underwent [REDACTED] She then [REDACTED]

In formulating my opinion regarding causation of Ms. Rausa's ovarian cancer, I considered all the relevant factors that could contribute to the development of her ovarian cancer, forming a differential diagnosis as follows:

1. Is the genital use of talcum powder associated with Ms. Rausa's type of cancer? Yes, she has an EOC of the high-grade serous subtype. This type of cancer is the most common EOC histologic subtype and has been associated with genital talcum powder use in multiple studies.
2. Was the duration and frequency of Ms. Rausa's talcum powder usage sufficient to cause ovarian cancer? Yes, Ms. Rausa reported [REDACTED]
3. Was there talc and/or asbestos found in her pathologic tissue, providing additional evidence of usage? Dr. Godleski in his pathologic evaluation found 2 talc particles. Although not a requirement, these findings provide further evidence to support my causation opinions in this case.

4. Was there enough time between the onset of use and the diagnosis of ovarian cancer to account for the expected latency period associated with the development of ovarian cancer? Yes, she reports use beginning approximately 50 years prior to the diagnosis of her ovarian cancer - consistent with the latency period described with carcinogens causing cancer and talcum powder use causing ovarian cancer.
5. Were other risk factors or protective factors present and, if so, what was their contribution to the development of ovarian cancer?

Risk Factors:

- Inherited genetic mutations – [REDACTED]
- Family history of ovarian or breast cancer – [REDACTED]
- Increasing age - Ms. Rausa was 63 at the time of diagnosis, which is the average age for women developing ovarian cancer.
- Nulliparity - Ms. Rausa is [REDACTED]
- Early menarche - [REDACTED]
- Late menopause - [REDACTED]
- High fat diet – [REDACTED]
- Infertility - [REDACTED]
- Endometriosis – [REDACTED]
- Polycystic ovarian syndrome – [REDACTED]
- Hormone replacement therapy – [REDACTED]
- IUD use – [REDACTED]
- Pelvic Inflammatory Disease – [REDACTED]
- Obesity – [REDACTED]

Protective Factors:

- Multiparity - [REDACTED]
- Breastfeeding - [REDACTED]

- Oral contraceptive use - [REDACTED]
- Tubal ligation - [REDACTED]
- Hysterectomy - [REDACTED]

In summary, after reviewing the available medical records, Plaintiff Profile Form, deposition testimony, and Dr. Godleski's report, it is my opinion that Ms. Rausa's long-term use of Johnson's Baby Powder on her body and in the genital area is a substantial contributing cause of her ovarian cancer. [REDACTED] are minor risk factors, but, in my opinion, do not represent substantial contributing causes of Ms. Rausa's ovarian cancer. My opinions are made to a reasonable degree of medical and scientific certainty. I reserve the right to update this report if new information becomes available. I also reserve the right to review and remark on the reports and testimony of Defendants' experts.

# Exhibit A

**Updated: March 2023****UNC SCHOOL OF MEDICINE  
CURRICULUM VITAE****Personal Information****Name:** Daniel Lyle Clarke-Pearson, M.D.**Address:** 105 Porter Place  
Chapel Hill, NC 27514861 Skin Camp Creek  
Road  
Todd, NC 28684**Phone:** (919) 215-9561**Education and Training**

Fellow	Duke University Medical Center	1979-1981	Gynecology Oncology
Residency	Duke University Medical Center	1975-1979	Obstetrics and Gynecology
Medical Degree	Case Western Reserve University School of Medicine	1971-1975	Medicine
Bachelor of Arts	Harvard College	1966-1970	Biology

**Professional Experience**

Professor	University of North Carolina, Chapel Hill	July 2019-present	Obstetrics and Gynecology Division of Gynecologic Oncology
Active Consulting Staff	The Outer Banks Hospital	Oct 2009 – 2012	Medicine/Oncology Section
Chairman	University of North Carolina at Chapel Hill School of Medicine	September 2005 – July 2019	Obstetrics and Gynecology
Robert A. Ross Distinguished Professor	University of North Carolina at Chapel Hill School of Medicine	September 2005 – July 2019	Obstetrics and Gynecology

James M. Ingram Professor of Gynecologic Oncology	Duke University Medical Center	July 1993-2005	Gynecologic Oncology
Division Director	Duke University Medical Center	July 1987-2005	Gynecologic Oncology
Professor	Duke University Medical Center	July 1987-2005	Obstetrics and Gynecology
Director of Gynecology and Gynecologic Oncology	University of Illinois at Chicago	January 1985-1987	Obstetrics and Gynecology
Associate Professor	University of Illinois at Chicago	July 1984-1987	Obstetrics and Gynecology
Associate Professor	Duke University Medical Center	January 1984	Obstetrics and Gynecology
Co-Director, Trophoblastic Disease Center	Duke University Medical Center	July 1982-1984	Obstetrics and Gynecology
Assistant Professor	Duke University Medical Center	July 1980-1984	Obstetrics and Gynecology

### **Honors and Awards**

2022	President-elect, Society of Pelvic Surgeons
2022	Distinguished Service Award, North Carolina Obstetrics and Gynecology Society
2019	UNC Lifetime Achievement Award for Medical Student Education
2009-2010	President, Society of Gynecologic Oncologists
2001-2020	America's Top Doctors for Women (176 Physicians): Women's Health
2008	CREOG National Faculty Award for Excellence in Resident Education
2004	Invited Panel Member, International Consensus Conference of the Prevention of Venous Thromboembolism, Windsor, England
2002	ACOG Roy Pitkin/Elsevier Award: One of top four papers published annually in <u>Obstetrics and Gynecology</u>
2001-present	America's Top Doctors for Women: Women's Health

1991	Invited Panel Participant, Consensus Meeting on the Prevention of Thromboembolism - Windsor, England
1985	Clinical Research Prize Paper – ACOG District Meeting
1981-1984	Junior Faculty Clinical Fellowship – American Cancer Society
1982	Donald F. Richardson Memorial Prize Paper -Best research paper presented by a Junior Fellow at a District ACOG Meeting
1981	Clinical Research Paper, Second Place ACOG Annual Clinical Meeting
1981	Junior Fellow First Prize Paper – ACOG District IV
1980	American Cancer Society Clinical Fellow
1979	Junior Fellow First Prize Paper – ACOG District IV

## BIBLIOGRAPHY

### Books and Chapters

1. **Clarke-Pearson DL**, Barber E. Prevention of Deep Vein Thrombosis and Pulmonary Embolism. ACOG Practice Bulletin, American College of Obstetricians and Gynecologists (Bulletin #232), Washington DC, 2021.
2. Tucker K, **Clarke-Pearson DL**. Complications of Disease and Therapy. In Clinical Gynecologic Oncology, Ninth Edition. (DiSaia PJ, Creasman WT, eds). Mosby/Elsevier, 2021
3. Doll K, **Clarke-Pearson DL**. Complications of Disease and Therapy. In Clinical Gynecologic Oncology, Eighth Edition. (DiSaia PJ, Creasman WT, eds). Mosby/Elsevier, 2016.
4. Havrilesky LJ, Lopez-Acevedo M, **Clarke-Pearson DL**. Palliative Surgery for Ovarian Cancer. In Surgery for Ovarian Cancer. (Bristow RE, Karlan BY, Chi DS, eds) CRC Press, Boca Raton, 2016.
5. **Clarke-Pearson DL**, Snook M L.. Preoperative Evaluation and Postoperative Management. In Clinical Gynecology (Bieber EJ, Horowitz I, Sanfillippo J., Shafi MJ, eds) Cambridge University Press. 2014
6. Abaid LN, **Clarke-Pearson DL**. Evaluation and Management of the Adenxal Mass in Gynecological Cancer Management: Identification Diagnosis and Treatment. (**Clarke-Pearson DL**, Soper J. eds) Wiley-Blackwell, London, 2010.
7. **Clarke-Pearson DL**, Soper JT: Gynecological Cancer Management: Identification Diagnosis and Treatment. Wiley-Blackwell, London, 2010.
8. Ragazzo J L, **Clarke-Pearson DL**. Cervical Neoplasia in Gynecological Cancer Management. Identification Diagnosis and Treatment. (**Clarke-Pearson DL**, Soper J. eds) Wiley-Blackwell, London, 2010.
9. Mendivil A, **Clarke-Pearson DL**. Unusual Neoplasms of the Uterus in Gynecological Cancer Management: Identification Diagnosis and Treatment. (**Clarke-Pearson DL**, Soper J. eds) Wiley-Blackwell, London, 2010.

10. **Clarke-Pearson DL**, Picklesimer A. Management of DVT/PE in Pregnancy. In The 5-Minute OB/GYN Clinical Consult (Ed. Paula J. Hilliard). Lippincott Williams and Wilkins, 2008.
11. **Clarke-Pearson DL**, Abaid L. Emergency Management of DVT/PE. In The 5-Minute OB/GYN Clinical Consult (Ed. Paula J. Hilliard). Lippincott Williams and Wilkins, 2008.
12. **Clarke-Pearson DL**. Complications of Disease and Therapy. In Clinical Gynecologic Oncology, Seventh Edition. (DiSaia PJ, Creasman WT, eds). Mosby/Elsevier, 2007.
13. **Clarke-Pearson DL**. Abaid L. Prevention of Deep Vein Thrombosis and Pulmonary Embolism. ACOG Practice Bulletin American College of Obstetricians and Gynecologists, Washington DC, 2007.
14. **Clarke-Pearson DLL**. Surgical Complications. In Précis, An update in Obstetrics and Gynecology, 3rd Edition, American College of Obstetricians and Gynecologists, Washington DC, 2007.
15. **Clarke-Pearson DLL**, Lee P, Spillman M, Lutman C. Preoperative Evaluation and Postoperative Management. In: Novak's Gynecology, 13th Edition (Berek J, Adashi E, Hillard P, eds.) Williams and Wilkins, Baltimore, 2006.
16. **Clarke-Pearson DLL**, Spillman M, Lutman C, Lee P. Preoperative Evaluation and Postoperative Management. In Clinical Gynecology (Bieber EJ, Horowitz I, Sanfillippo J. eds) Churchill Livingstone, 2005.
17. **Clarke-Pearson DL** L, Havrilesky L. Intestinal Surgery in Surgery for Ovarian Cancer: Principles and Practice (Bristow RE, Karlan BY, eds) Taylor and Francis, 2005.
18. Alvarez A, **Clarke-Pearson DLL**: Gynecologic Cancers. In Geriatric Medicine, Fourth Edition (Ed Cassel, et al.) Springer-Verlag New York, NY, 2001.
19. **Clarke-Pearson DLL**, Olt G, Rodriguez G, Boente MP: Preoperative Evaluation and Preparation for Gynecologic Surgery. In: Textbook of Gynecology, Second Edition (Copeland L, Jarrell J, eds). W. B. Saunders, Philadelphia, 2000.
20. Nichols D, **Clarke-Pearson DLL**: Gynecologic, Obstetric and Related Surgery: Second Edition. Mosby, St. Louis, 2000.
21. Carney M, **Clarke-Pearson DL**. Endometrial Cancer. In: Gynecology for The Primary Care Physician, Stoval T, Ling F, eds.). Current Medicine, Inc. Philadelphia, 1999.
22. **Clarke-Pearson DLL**. Venous Thromboembolic Complications. In: Management of Perioperative Complications in Gynecology, (V. Baker, G. Deppe, eds.). WB Saunders, Philadelphia, 1997.
23. **Clarke-Pearson DLL**, Olt GJ, Rodriguez GC, Boente MP. Preoperative Evaluation and postoperative Management. In: Novak's Gynecology, 12th Edition (Berek J, Adashi E, Hillard P, eds.) Williams and Wilkins, Baltimore, 1996.
24. Evans AC, **Clarke-Pearson DLL**: Gynecologic Cancers. In: Geriatric Medicine, Third Edition (Ed Cassel, et. al.) Springer-Verlag, New York, 1996.
25. **Clarke-Pearson DLL**, Hurteau JA, Elbendary AA, Carney M: Chemotherapy of Gynecologic Malignancies in Telinde's Operative Gynecology (eighth edition), (Thompson JD and Rock JA eds.) Lippincott-Raven, Philadelphia, 1996.
26. **Clarke-Pearson DL**: Salpingectomy-Oophorectomy. In: Atlas of General Surgery (Sabiston DC, ed.). WB Saunders, Philadelphia, 1994.
27. **Clarke-Pearson DL**: Abdominal Hysterectomy. In: Atlas of General Surgery (Sabiston DC, ed.).

WB Saunders Co., Philadelphia, 1994.

28. **Clarke-Pearson DLL**: Obstetrics and Gynecology. In: Prevention of Venous Thromboembolism (Bergqvist D, Comerota AJ, Nicolaides AN, Scurr JH, eds.). Med-Orion Publishing, London, 1994.
29. **Clarke-Pearson DLL**: Venous thrombotic disease in pregnancy. In: Current Therapy in Obstetrics and Gynecology (Zuspan FP, Quilligan EJ, eds.). WB Saunders Co., Philadelphia, 1994.
30. **Clarke-Pearson DLL**, Kohler MF, Hurteau JA, Elbendary A: Surgery for advanced ovarian cancer. In: Clinical Obstetrics and Gynecology (Soper, JT, Ed.) JP Lippincott, 1994.
31. **Clarke-Pearson DLL**, Soper JT, Berchuck A, Rodriguez GC: Residents Handbook in Gynecologic Oncology, Duke University, 1988, 1994.
32. **Clarke-Pearson DLL**: Prevention of Venous Thromboembolism in Gynecologic Surgery Patients. In: Current Opinion in Obstetrics and Gynecology (Herbst AL, ed) Current Science, Philadelphia, 1993.
33. **Clarke-Pearson DLL**, Rodriguez GC, Boente M: Palliative Surgery for Epithelial Ovarian Cancer. In: Ovarian Cancer (Rubin SC, Sutton GP, Eds). McGraw-Hill, Inc., New York, pp. 351-373, 1993.
34. **Clarke-Pearson DLL**, Rodriguez GC: Hematologic Complications. In: Complications in Gynecologic Surgery: Prevention, recognition and management (Orr J, Shingleton H, eds). JB Lippincott Co., Philadelphia, 1993, pp. 83-104.
35. **Clarke-Pearson DLL**, Soper JT: Vaginal Reconstruction with Gracilis Myocutaneous Flaps. In: Reconstructive Urology Vol 2 (G Webster, R Kirby, L King, B Goldwasser) Boston Blackwell Scientific Publications, 1993.
36. Bast RC, Xu FJ, Haas M, Daly L, Bast BS, McKenzie S, Soper JT, Berchuck A, **Clarke-Pearson DLL**, Boyer C: Will multiple serum markers increase the sensitivity of CA 125 for the early detection of epithelial ovarian cancer? In: Ovarian Cancer, Chapman and Hall Medical, London. 1993.
37. **Clarke-Pearson DLL**, Olt G, Rodriguez G, Boente M: Preoperative and Postoperative Management. In: Operative Gynecology (D Gershenson, S Curry, Eds) Saunders, Inc., 1993.
38. **Clarke-Pearson DLL**, Olt G, Rodriguez G, Boente M: Preoperative evaluation and preparation. In: Textbook of Gynecology. (L Copeland, A DeCherney, Eds). Saunders, Inc., 1993.
39. Beckmann CRB, Ling F, Barzansky BM, Sharf BF, **Clarke-Pearson DLL**: History and Physical Examination. In: Clinical Manual of Gynecology (Second Edition), (TG Stovall, RL Summit, CRB Beckman, FW Ling, Eds). McGraw-Hill, Inc., New York, 1992.
40. **Clarke-Pearson DLL**: Vaginal Dysplasia and Carcinoma. In: Clinical Manual of Gynecology (Second Edition), (TG Stovall, RL Summit, CRB Beckman, FW Ling, Eds). McGraw-Hill, Inc., New York, 1992.
41. **Clarke-Pearson DLL**: Vulvar Dysplasia and Carcinoma. In: Clinical Manual of Gynecology (Second Edition), (TG Stovall, RL Summit, CRB Beckman, FW Ling, Eds). McGraw-Hill, Inc., New York, 1992.
42. **Clarke-Pearson DLL**, Soisson AP, Wall L: Radical Hysterectomy. In: Gynecologic Oncology, Treatment Rationale and Techniques. (B Greer and J Berek, Eds) Elsevier Science Publishing Co, Inc, New York, 1991.
43. **Clarke-Pearson DLL**, Soper JT, Berchuck A, Hunter VG: Ovarian Cancer. In: Comprehensive

Textbook of Oncology (Second Edition), (AR Moossa, Ed), Williams and Wilkins, Baltimore, 1991.

44. **Clarke-Pearson DLL**: Ovarian Cancer. In: Principles of Medical Therapy in Pregnancy (Second Edition), (N Gleicher, Ed), Plenum Publishing Co, New York, 1990.
45. Bast RC Jr, Boyer CM, Olt GJ, Berchuck A, Soper JT, **Clarke-Pearson DL**, Xu FJ, Ramakrishnan S: Identification of Markers for Early Detection of Epithelial Ovarian Cancer. In: Ovarian Cancer: Biological and Therapeutic Challenges. (Sharp F, Mason WP, and Leake RE, Eds). Chapman and Hall Medical, London, p. 265, 1990.
46. **Clarke-Pearson DLL**, Dawood MY: Green's Gynecology: Essentials of Clinical Practice, Fourth Edition. Little, Brown and Company, Boston, 1990.
47. Soper JT, Hughes CL, **Clarke-Pearson DLL**: Gynecologic Surgery. In: Fundamentals of Surgery (RD Leichty and JT Soper, Eds) CV Mosby Co, St. Louis, 1989, p. 500.
48. **Clarke-Pearson DLL**, Creasman WT: Ovarian Cancer. In: Comprehensive Textbook of Oncology. (AR Mossa, MC Robson, and SC Schimpff, Eds) Williams and Wilkins, pp. 845-854, 1986.
49. **Clarke-Pearson DLL**: Deep Venous Thrombosis in Gynecologic Oncology. In: Gynecology and Obstetrics. (JW Sciarra, Ed) Harper and Row Publ, Inc, Philadelphia, Ch. 56, pp. 1-17, 1986.
50. **Clarke-Pearson DLL**: Handbook for Residents: Gynecologic Oncology. University of Illinois Press (95 Pages), 1986.
51. **Clarke-Pearson DLL**: Postoperative Thromboembolic Disease in Gynecology: Natural History, Risk Factors, and Prophylaxis. In: Strategies in Gynecologic Surgery. (HJ Buchsbaum and LA Walton, Eds) Springer-Verlag, New York, pp. 145-161, 1986.
52. Smith EB, **Clarke-Pearson DLL**, Creasman WT: Screening for Cervical Cancer. In: Screening and Monitoring Cancer. (BA Stoll, Ed) John Wiley and Sons, Chichester, pp. 153-166, 1985.
53. Soper JT, **Clarke-Pearson DLL**: Gynecology. In: Synopsis of Surgery. (RD Leichty, JT Soper, Eds) CV Mosby Co, St. Louis, Ch. 45, pp. 665-685, 1985.
54. **Clarke-Pearson DLL**: Prevention of Thromboembolic Phenomena. In: Gynecology and Obstetrics. (JW Sciarra, Ed) Harper and Row Pub, Inc, Philadelphia, Vol. 1, Ch. 95, pp. 1-11, 1985.
55. **Clarke-Pearson DLL**: Carcinoma of the Ovary. In: Principles of Medical Therapy in Pregnancy. (N Gleicher, Ed) Plenum Publishing Co, New York, Ch. 166, pp. 1106-1112, 1985.
56. Creasman WT, **Clarke-Pearson DLL**: Pelvic Exenteration. In: Progress in Obstetrics and Gynecology. (J Studd, Ed) Churchill-Livingston, London, Vol. 4, pp. 243-253, 1984.
57. Creasman WT, **Clarke-Pearson DLL**: Immunological Therapy Monitoring in Ovarian Cancer. In: Cancer Campaign. Gustav Fischer-Verlag, Stuttgart, New York, Vol. 7, 1984.
58. Creasman WT, **Clarke-Pearson DLL**: Ovarian Cancer: Postoperative Therapy. In: Contemporary Issues in Clinical Oncology: Gynecologic Oncology. (AA Forastiere, Ed) Churchill-Livingston, Inc, New York, pp. 139-154, 1984.
59. Hammond CB, **Clarke-Pearson DLL**, Soper JT: Management of Patients with Gestational Trophoblastic Neoplasia: Experience of the Southeastern Regional Center. In: Human Trophoblast Neoplasms. (RA Pattillo and RO Husa, Eds) Plenum Publishing Corp, New York, pp. 369-381, 1984.

60. Creasman WT, **Clarke-Pearson DLL**: Immunotherapy of Ovarian Cancer. In: Clinics in Obstetrics and Gynecology. (PJ DiSaia, Ed) WB Saunders Co, London, pp. 297-306, 1983.
61. Creasman WT, **Clarke-Pearson DLL**: Ovarian Carcinoma. In: Current Therapy of Obstetrics and Gynecology. (EJ Quilligan, Ed) WB Saunders Co, Philadelphia, pp. 198-200, 1983.

#### Original Research

1. Alli M Straubhar<sup>1</sup>, Qin Zhou<sup>1</sup>, Alexia Iasonos<sup>1</sup>, Daniel L. Clarke-Pearson<sup>2</sup>, William A Cliby<sup>3</sup>, Mitchel S Hoffman<sup>4</sup>, Dennis S Chi<sup>1</sup> Current surgical practices amongst Gynecologic Oncologists in the United States. ( Submitted) 2022
2. Hoffman M, Chi DS, **Clarke-Pearson DLL**, Cliby W, Creasman W, Underwood, PB. Surgical Training in Gynecologic Oncology: Past, Present, Future. Gynecol Oncol. 2020; 158:188
3. Barber EL, Polan RM, Strohl AE, Siedhoff M, **Clarke-Pearson DLL**. Cystoscopy at the Time of Hysterectomy for Benign Indications and Delayed Lower Genitourinary Tract Injury Obstet Gynecol 2019; 133: 1-9.
4. Chalas E. **Clarke-Pearson DLL**, Berek JS., Occult Gynecologic Cancer in Women Undergoing Hysterectomy or Myomectomy for Benign Indications. Obstet Gynecol. 2018 Aug;132(2):519.
5. Parker WH, Berek JS, Pritts EA, Olive D, Chalas E, **Clarke-Pearson DL**. Regarding “incidence of Occult Uterine Malignancy Following Vaginal Hysterectomy with Morcellation. J Minim Invasive Gynecol. 2018 Jan;25(1):187-188.
6. Pritts EA, Olive DL, **Clarke-Pearson DLL**. Abdominal versus Minimally Invasive Hysterectomy. JAMA 2016. 316:2677
7. Barber EL, **Clarke-Pearson DLL**. : Prevention of Venous Thromboembolism in Gynecologic Oncology Surgery. Gynecol Oncol. 2017. 144: 420-427
8. Siedhoff M, Doll K M, **Clarke-Pearson DLL**, MD, Rutstein SE, Laparoscopic hysterectomy with morcellation versus abdominal hysterectomy for presumed fibroids: an updated decision analysis following the 2014 FDA Safety Communications. Am J Obstet Gynecol. 2017; 216: 259.
9. Barber EL, Gehrig P, **Clarke-Pearson DLL**. Venous Thromboembolism in Minimally Invasive Compared With Open Hysterectomy for Endometrial Cancer. Obstet Gynecol. 2016; 128:121-6.
10. Barber EL, **Clarke-Pearson DLL**. The Limited Utility of Currently Available Venous Thromboembolism Risk Assessment Tools in Gynecologic Oncology Patients. Am J Obstet Gynecol; 2016; 215: 445.
11. Giovinazzo H, Kumar P, Sheikh A, Brooks KM, Ivanovic M, Walsh M, Caron WP, Kowalsky RJ, Song G, Whitlow A, **Clarke-Pearson DLL**, Brewster WR, Van Le L, Zamboni BA, Bae-Jump V, Gehrig PA, Zamboni WC. Technetium Tc 99m sulfur colloid phenotypic probe for the pharmacokinetics and pharmacodynamics of PEGylated liposomal doxorubicin in women with ovarian cancer. Cancer Chemother Pharmacol. 2016 Mar;77(3):565-73. doi: 10.1007/s00280-015-2945-y. Epub 2016 Jan 28.  
a. PMID: 26822231
12. Tarek Toubia, MD, Janelle K. Moulder, MD, Lauren D. Schiff, MD, **Daniel Clarke-Pearson, MD**, Siobhan M. O'Connor, MD and Matthew T. Siedhoff, MD, MSCR. Peritoneal Washings after Power Morcellation in Laparoscopic Myomectomy: A Pilot Study. J Min Invasive Gynecology.

2016. (accepted)

13. Parker WH, Kaunitz AM, Pritts EA, Olive DL, Chalas E, **Clarke-Pearson DLL**, Berek JS. US Food and Drug Administration's Guidance Regarding Morcellation of Leiomyomas: Well-Intentioned, But is it Harmful for Women? *Obstet Gynecol* 2016; 127: 18-23.
14. Rutstein SB, Siedhoff MT, Geller EJ, Doll KM, Wu JM, **Clarke-Pearson DLL**, Wheeler SB. Cost-effectiveness of laparoscopic hysterectomy with morcellation compared to abdominal hysterectomy for presumed fibroids. *The Journal of Minimally Invasive Gynecology*. 2016; 223-33.
15. Siedhoff MT, Wheeler SB, Rutstein SE, Geller EJ, Doll KM, Wu JM, **Clarke-Pearson DLL**. Laparoscopic hysterectomy with morcellation vs abdominal hysterectomy for presumed fibroid tumors in premenopausal women: a decision analysis. *Am J Obstet Gynecol*. 2015 May; 212(5):591
16. Siedhoff MT, Rutstein SE, Wheeler SB, Geller EJ, Doll KM, Wu JM, **Clarke-Pearson DLL**. Cost-Effectiveness of Laparoscopic Hysterectomy with Morcellation Compared to Abdominal Hysterectomy for Presumed Benign Leiomyomata. *J Minim Invasive Gynecol*. 2015; 22: S78.
17. Stine JE, **Clarke-Pearson DLL**, Gehrig PA. Uterine morcellation at the time of hysterectomy: Techniques, risks and recommendations. *Obstetrics and Gynecology Survey* 2014; 69: 415-25.
18. Doll KM, Kalinowski A, Snavely AC, Irwin DE, Bensen JT, Bae-Jump V, Kim KH, Van Le L, **Clarke-Pearson DLL**, Gehrig PA. Obesity is associated with worse quality of life in women with gynecologic malignancies: An opportunity to improve patient-centered outcomes. *Cancer*, 2015; 121:395-402. PMID 25250951
19. Stine JE, Doll KM, Moore DT, Van Le L, Ko E, Soper JT, **Clarke-Pearson DL**, Bae-Jump V, Gehrig PA, Kim KH. The Prevalence and Impact of Invasive Procedures in Women with Gynecologic Malignancies Referred to Hospice Care. *Jour of Palliative Care and Med*. Accepted April 15 2014.
20. Caron WP, Lay JC, Fong AM, La-Beck NM, Kumar P, Newman SE, Zhou H, Monaco JH, **Clarke-Pearson DLL**, Brewster WR, Van Le L, Bae-Jump VL, Gehrig PA, Zamboni WC. Translational Studies of Phenotypic Probes for the Mononuclear Phagocyte System and Liposomal Pharmacology *J Pharmacol Exp Ther* jpet.113.208801; published ahead of print September 16, 2013.
21. **Clarke-Pearson DLL**, Geller EJ. Complications of hysterectomy. *Obstet Gynecol*. 2013 Mar;121(3):654-73
22. **Clarke-Pearson DLL**, Abaid LN. Prevention of venous thromboembolic events after gynecologic surgery. *Obstet Gynecol*. 2012 Jan;119(1):155-67.
23. **Clarke-Pearson DLL**. Thromboprophylaxis for gynecologic surgery: why are we stuck in 1975? *Obstet Gynecol*. 2011 Nov;118(5):973-5.
24. Higginson DS, Morris DE, Jones EL, **Clarke-Pearson DLL**, Varia MA. Stereotactic body radiotherapy (SBRT): Technological innovation and application in gynecologic oncology. *Gynecol Oncol*. 2011; 120: 404-12.
25. Attitudes regarding the use of hematopoietic colony-stimulating factors and maintenance of relative dose intensity among gynecologic oncologists. Alvarez Secord A, Bae-Jump V, Havrilesky LJ, Calingaert B, **Clarke-Pearson DLL**, Soper JT, Gehrig PA. *Int J Gynecol Cancer*. 2009 Apr;19(3):447-54.
26. Nicolaides A, Goldhaber SZ, Maxwell GL, Labropoulos N, **Clarke-Pearson DLL**, Tyllis TH,

- Griffin MB. Cost benefit of intermittent pneumatic compression for venous thromboembolism prophylaxis in general surgery. *Int Angiol.* 2008 Dec;27(6):500-6.
27. Carlson JW, Kauderer J, Walker JL, Gold MA, O'Malley D, Tuller E, **Clarke-Pearson DLL**; Gynecologic Oncology Group. A randomized phase III trial of VH fibrin sealant to reduce lymphedema after inguinal lymph node dissection: a Gynecologic Oncology Group study. *Gynecol Oncol.* 2008;110(1):76-82.
28. Lyman GH, Khorana AA, Falanga A, **Clarke-Pearson DL**, Flowers C, Jahanzeb M, Kakkar A, Kuderer N M, Levine MN, Liebman H, Mendelson D, Raskob G, Somerfield MR, Thodiyil P, Trent D, Francis CW. American Society of Clinical Oncology Guideline: Recommendations for Venous Thromboembolism Prophylaxis and Treatment in Patients with Cancer. *J Clin Oncol.* 2007; 25: 5490-5505.
29. Alvarez A, Laura J Havrilesky, Bae-Jump V, Chin JR, Calingaert B, Bland AE, Rutledge TL, Berchuck A, **Clarke-Pearson DLL**, Gehrig PA. The role of multi-modality adjuvant chemotherapy and radiation in women with advanced stage endometrial cancer *Gynecol Oncol* 2007; 107: 285- 91
30. Martino MA, Williamson E, Rajaram L, Lancaster JM, Hoffman MS, Maxwell GL, Clarke- Pearson DL. Defining practice patterns in Gynecologic Oncology to prevent pulmonary embolism and deep venous thrombosis. *Gynecol Oncol*, 2007;106: 439-445.
31. Secord AA, Havrilesky LJ, Carney ME, Soper JT, **Clarke-Pearson DLL**, Rodriguez GC, Berchuck A. Weekly low-dose paclitaxel and carboplatin in the treatment of advanced or recurrent cervical and endometrial cancer. *Int J Clin Oncol.* 2007; 12: 31-36.
32. Havrilesky LJ, Cragun JM, Calingaert B, Secord AA, Valea FA, **Clarke-Pearson DLL**, Berchuck A, Soper JT. The prognostic significance of positive peritoneal cytology and adenxal/serosal metastasis in stage IIIA endometrial cancer. *Gynecol Oncol* 2007; 104: 401-405.
33. Havrilesky L, Secord A, Bae-Jump V, Ayeni T, Calingaert B, **Clarke-Pearson DLL**, Berchuck A, Gehrig PA. Outcomes in surgical stage I uterine papillary serous carcinoma. *Gynecol Oncol*, 2007; 105: 677-82.
34. Soper JT, **Clarke-Pearson DLL**. Comparison of Gracilis and Rectus Abdominis Myocutaneous Flap Neovaginal Reconstruction Performed During Radical Pelvic Surgery: Flap-Specific Morbidity. *Int J Gynecol Oncol*, 2007 17: 298-303.
35. Rose P, Shamshad A, Watkins E, Thigpen JT, Deppe G, **Clarke-Pearson DLL**, Insalaco S. Long-Term Follow-Up of a Randomized Trial Comparing Concurrent Single Agent Cisplatin or Cisplatin-Based Combination Chemotherapy or Hydroxyurea During Pelvic Irradiation for Locally Advanced Cervical Cancer: A Gynecologic Oncology Group Study. *J Clin Oncol* ,2007; 25: 2804-10
36. Spriggs DR, Brady M, Vaccarello L, **Clarke-Pearson DL**, Burger RA, Mannel R, Boggess JF, Lee RB, Hanly M. A Phase III Randomized Trial of IV Cisplatin plus Paclitaxel as a 24- or 96- hour Infusion in Patients with selected Stage III or Stage IV Epithelial Ovarian Cancer: A Gynecologic Oncology Group Study. *J Clin Oncol*, 2007; 25: 4466-72.
37. Soper JT, Spillman MA, Sampson JH, Kirkpatrick JP, Wolf JK, **Clarke-Pearson DLL** High-risk Gestational Trophoblastic Neoplasia with Brain Metastases: Individualized Multidisciplinary Therapy in the Management of Four Patients. *Gynecol Oncol* 2007; 104: 691-694.
38. Jones E, Alvarez Secord A, Prosnitz LR, Samulski TV, Oleson JR, Berchuck A, **Clarke-Pearson DLL**, Soper J, Dewhirst MW, Vujaskovic Z. Intra-peritoneal cisplatin and whole abdomen hyperthermia for relapsed ovarian carcinoma. *Int J Hyperthermia* 2006; 22: 161-172.

39. Maxwell GL, **Clarke-Pearson DLL**. Pulmonary embolism after major abdominal surgery in gynecologic oncology. *Obstet Gynecol* 2006; 108: 209
40. Lutman CV, Havrilesky LJ, Cragun JM, Secord A, Calingaert B, Berchuck A, **Clarke-Pearson DLL**, Soper JT. Pelvic lymph node count is an important prognostic variable for FIGO Stage I and II endometrial carcinoma with high risk histology. *Gynecol Oncol* 2006; 102:92-97.
41. Soper JT, Secord AA, Havrilesky LJ, Berchuck A, **Clarke-Pearson DLL**. Rectus abdominis myocutaneous and myoperitoneal flaps for neovaginal reconstruction after radical pelvic surgery: comparison of flap-related morbidity. *Gynecol Oncol*. 2005; 97: 596-601.
42. 42. Cragun JM, Havrilesky LJ, Calingaert B, Synan I, Secord AA, Soper JT, **Clarke-Pearson DL**, Berchuck A. Retrospective analysis of selective lymphadenectomy in apparent early-stage endometrial cancer. *J Clin Oncol* 2005; 23: 3668-75.
43. Soper JT, Havrilesky LJ, Secord AA, Berchuck A, **Clarke-Pearson DLL**. Rectus abdominis myocutaneous flaps for neovaginal reconstruction after radical pelvic surgery. *Int J Gynecol Cancer*. 2005; 15: 542-8.
44. Havrilesky LJ, Cragun JM, Calingaert B, Synan I, Secord AA, Soper JT **Clarke-Pearson DL**, Berchuck A. Resection of lymph node metastases influences survival in stage IIIC endometrial cancer. *Gynecol Oncol*. 2005; 99: 689-95.
45. Walker JL, Armstrong D, Huang H, Fowler J, Webster K, Burger R, **Clarke-Pearson DL**. Intraperitoneal Catheter Outcomes in a Phase III Trial of Intravenous vs. Intraperitoneal Chemotherapy in Optimal Stage III Ovarian and Primary Peritoneal Cancer. A Gynecologic Oncology Group Study. *Gynecol Oncol* 2005; 100: 27-32.
46. Greer B, Bundy BN, Ozols RF, Fowler JM, **Clarke-Pearson DL**, Burger RA, Mannel R, DeGeest K, Hartenbach EM, Baergen RN, Copeland LJ. Implications of second-look laparotomy in the context of optimally resected Stage III Ovarian Cancer: A non-randomized comparison using an explanatory analysis: a Gynecologic Oncology Group Study. *J Clin Oncol*. 2005; 99:71-9.
47. Secord AA, Jones EL, Hahn CA, Petros WP, Yu D, Havrilesky LJ, Soper JT, Berchuck A, Spasojevic I, **Clarke-Pearson DL**, Prosnitz LR, Dewhirst MW. Phase I/II trial of intravenous Doxil and whole abdomen hyperthermia in patients with refractory ovarian cancer. *Int J Hyperthermia* 2005; 21: 333-47
48. Dainty L, Maxwell GL, **Clarke-Pearson DL**, Myers ER. Cost-effectiveness of combination thromboembolism prophylaxis in gynecologic oncology surgery. *Gynecol Oncol* 2004; 93: 366- 73.
49. Rose PG, Nerenstone S, Brady MF, **Clarke-Pearson DL**, Olt G, Rubin SC, Moore DH. Secondary Surgical Cytoreduction for Advanced Stage Ovarian Carcinoma with Suboptimal Residual Disease. *N Engl J Med*. 2004; 351: 2489-97.
50. Soper JT, Reisinger SA, Asbury R, Jones E, **Clarke-Pearson DL**. Feasibility Study of Concurrent Weekly Cisplatin and Whole Abdominopelvic Irradiation Followed by Doxorubicin/Cisplatin Chemotherapy for Locally Advanced Endometrial Carcinoma: a Gynecologic Oncology Group Study. *Gynecol Oncol* 2004; 95: 95-100.
51. Rader JS, **Clarke-Pearson DL**, Moore M, Carson L, Holloway R, Kao MS, Wiznitzer I, Douglass EC. A phase II study to determine the efficacy and tolerability of intravenous ZD9331 in heavily pretreated patients with ovarian cancer. *Gynecol Oncol*. 2003; 91: 318-25.
52. Jones EL, Samulski TV, Dewhirst MW, Secord AA, Berchuck A, **Clarke-Pearson DL**, Havrilesky LJ, Soper J, Prosnitz LR. A Pilot Phase II Trial of Concurrent Radiotherapy, Chemotherapy, and Hyperthermia for Locally Advanced Cervical Carcinoma. *Cancer*. 2003; 98:277-282.

53. Havrilesky LJ, Peterson BL, Dryden DK, Soper JT, **Clarke-Pearson DL**, Berchuck A. Predictors of clinical Outcomes in the Laparoscopic Management of Adenxal Masses. *Obstet Gynecol*. 2003; 102: 243-51
54. Havrilesky LJ, Wong TZ, Secord AA, Berchuck A, **Clarke-Pearson DL**, Jones EL. The role of PET scanning in the detection of recurrent cervical cancer. *Gynecol Oncol* 2003; 90:186-190
55. Roth TM, Secord AA, Havrilesky LJ, Jones E, **Clarke-Pearson DL** . High Dose Rate Intraoperative Radiotherapy for Recurrent Cervical Cancer and Nodal Disease. *Gynecol Oncol*. 2003; 91: 258-260.
56. Havrilesky LJ, Alvarez AA, Sayer RA, Lancaster JM, Berchuck A, **Clarke-Pearson DL**, Rodriguez GC, Carney ME: Weekly low-dose carboplatin and paclitaxel in the treatment of recurrent ovarian and peritoneal cancer. *Gynecol Oncol* 2003; 88: 51-57.
57. Ozols RF, Bundy BN, Greer BE, Fowler JM, **Clarke-Pearson DL**, Burger RA, Mannel R, DeGeest K, Hartenbach EM, Baergen R. Phase III Trial of Carboplatin and Paclitaxel Compared with Cisplatin and Paclitaxel in Patients with Optimally Resected Stage III Ovarian Cancer: a Gynecologic Oncology Group Study. *J Clin Oncol* 2003; 21: 3194-3200.
58. Varia MA, Stehman FB, Bundy BN, Benda JA, **Clarke-Pearson DL**, Alvarez RD, Long HJ. Intraperitoneal Radioactive Phosphorous (32P) versus observation following negative Second- Look Laparotomy for Stage III Ovarian Carcinoma: A Randomized Trial of the Gynecologic Oncology Group. *J Clin Oncol* 2003; 21: 2849-2855
59. Bloss JD, Brady M, Rocereto T, Partridge EE, **Clarke-Pearson DL**. Extraovarian Peritoneal Serous Papillary Carcinoma: A Phase II Trial of Cisplatin and Cyclophosphamide with Comparison to a cohort with Papillary Serous Ovarian Carcinoma-A Gynecologic Oncology Group Study. *Gynecol Oncol* 2003; 89:148-54
60. **Clarke-Pearson DL**, Maxwell GL, Synan I, Dodge R, McClelland C. Risk factors which predispose patients to thromboembolism despite prophylaxis with external pneumatic compression. *Obstet Gynecol* 2003; 101:157-163.
61. Bookman MA, Darcy KM, **Clarke-Pearson DL**, Boothby R, Horwitz I. Evaluation of monoclonal Humanized Anti-HER2 Antibody (Trastuzumab, Herceptin) in Patients with recurrent or refractory Ovarian or Primary Peritoneal Carcinoma with Overexpression of HER2: A Phase II Trial of the Gynecologic Oncology Group. *J Clin Oncol* 2003; 21:283-290.
62. Gore M, Oza A, Rustin G, Malefetano J, Calvert H, **Clarke-Pearson DL**, Carmichael J, Ross G, Beckman R, Fields S. A Randomized Trial of Oral versus Intravenous Topotecan in Patients with relapsed epithelial Ovarian Cancer. *Euro J Cancer*. 2002; 38:57-63.
63. Maxwell GL, Synan I, Hayes R, **Clarke-Pearson DL**. Preference and Compliance in Thromboembolism Prophylaxis for Gynecologic Oncology Patients. *Obstet Gynecol*. 2002, 100: 451
64. Markman M, Bundy B, Alberts D, Fowler J, **Clarke-Pearson DL**, Carson LF, Walder S, Sickel J. Phase III trial of standard dose intravenous cisplatin plus paclitaxel versus moderately high-dose carboplatin followed by intravenous paclitaxel and intraperitoneal cisplatin in small volume stage III ovarian cancer: an intergroup study of the Gynecologic Oncology Group, Southwestern Oncology Group, and Eastern Cooperative Oncology Group. *J Clin Oncol*; 2001; 19: 1001-1007
65. Maxwell GL, Synan I, Dodge R, Carroll B, **Clarke-Pearson DL**. Prevention of Venous Thrombosis in Postoperative Gynecologic Oncology Patients: A Prospective Randomized Trial Comparing Pneumatic Calf Compression and Low Molecular Weight Heparin (dalteparin) *Obstet Gynecol*

2001; 98: 989-995

66. **Clarke-Pearson DL**, Van Le L, Whitney CW, Hanjani P, Kristensen G, Malfetano JH, Beckman RA, Ross GA, Lane SR, DeWitte MH, Fields SZ. Oral Topotecan as Single-Agent Second-Line Chemotherapy in Patients with Advanced Ovarian Cancer. *J Clin Oncol* 2001; 19:3976-3975
67. Rader J, **Clarke-Pearson, DL** Moore M, et al. Phase II Trial of ZD9331 as third-line therapy for patients with ovarian carcinoma. *Ann Oncol* 2000; 11 (4): 83
68. Cirisano FD Jr., Robboy SJ, Dodge RK, Bentley RC, Krigman HR, Synan IS, Soper JT, **Clarke-Pearson DL**. The outcome of stage I-II clinically and surgically staged papillary serous and clear cell endometrial cancers when compared with endometrioid carcinoma. *Gynecol Oncol* 77:55-65, 2000.
69. Maxwell GL, Myers ER, **Clarke-Pearson DL**. Cost-effectiveness of deep venous thrombosis prophylaxis in gynecologic oncology surgery. *Obstetrics & Gynecol* 95:206-14,2000.
70. Rose PG, Bundy BN, Watkins EB, Thigpen JT, Deppe G, Maiman MA, **Clarke-Pearson DL**, Insalaco S. Concurrent cisplatin-based radiotherapy and chemotherapy for locally advanced cervical cancer. *N Engl J Med* 340:1144-53, 1999.
71. Ashih H. Gustilo-Ashby T, Myers ER, Andrews J, **Clarke-Pearson DL**., BerryD, Berchuck A. Cost-effectiveness of treatment of early stage endometrial cancer. *Gynecol Oncol* 74:208-16, 1999.
72. Cirisano FE Jr. Robboy SJ, Dodge RK, Bentley RC, Krigman HR, Synan IS, Soper JT, Clarke-Pearson DL. Epidemiologic and surgicopathologic findings of papillary serous and clear cell endometrial cancers when compared to endometrioid carcinoma. *Gynecol Oncol* 74:385-94, 1999.
73. Whitney CW, Sause W, Bundy BN, Malfetano JH, Hannigan EV, Fowler WC, **Clarke-Pearson DL**, Liao SY: A randomized comparison of fluorouracil plus cisplatin versus hydroxyurea as an adjunct to radiation therapy in stages IIB-IVA carcinoma of the cervix with negative para-aortic lymph nodes: A Gynecologic Oncology Group and Southwest Oncology Group Study. *J Clin Oncol* 17:1339-48, 1999.
74. Boente MP, Berchuck A, Whitaker RS, Kalen A, Xu FJ, **Clarke-Pearson DL**, Bell RM, Bast RC: Suppression of Diacylglycerol Levels by Antibodies Reactive with c-erbB-2 (HER-2/neu) Gene Product p185c-erbB-2 in Breast and Ovarian Cancer Cell Lines. *Gynecol Oncol* 70:49-55, 1998.
75. Woolas RP, Jacobs IJ, XU F, Berchuck A, Soper JT, **Clarke-Pearson DL**, Spence-Jones S, Oram D, Hudson CN, Shepherd JH, Bast RC, Jr.: Multiple tumor marker measurements to differentiate stage I ovarian cancer from the benign ovarian cyst. *Gyn Techniques Vol (3) 3*:123-126, 1997.
76. Clifford SL, Kaminetsky CP, Cirisano FD, Dodge R, Soper JT, **Clarke-Pearson DL**, Berchuck A: Racial disparity in overexpression of the p53 tumor suppressor gene in stage I endometrial cancer. *Am J Obstet Gynecol* 176:S229-32, 1997.
77. Roberts JA, Jenison EL, **Clarke-Pearson DL**, Longleben A: A randomized, multicenter, double-blind, placebo-controlled, dose finding study of ORG 2766 in the prevention or delay of cisplatin-induced neuropathies in women with ovarian cancer. *Gynecol Oncol* 67:172-177, 1997
78. Hoskins WJ, McGuire WP, Brady MF, Kucera PR, Partridge EE, Look KY, **Clarke-Pearson DL**, Davidson M. Combination paclitaxel (Taxol) - cisplatin vs cyclophosphamide -cisplatin as primary therapy in patients with suboptimally debulked advanced ovarian cancer. Supplement: *Int J Gynecol Cancer* 7:9-13, 1997.
79. McGuire WP, Hoskins WJ, Brady MF, Kucera PR, Partridge EE, Look KY, **Clarke-Pearson DL**, Davidson M. Comparison of combination therapy with paclitaxel and cisplatin versus

cyclophosphamide and cisplatin in patients with suboptimal stage III and stage IV ovarian cancer: A Gynecologic Oncology Group Study. *Semin Oncol* 24 (1 Suppl 2):S2-13-S2-16, 1997.

80. Omura GA, Blessing JA, Vaccarello L, Berman ML, **Clarke-Pearson DL**, Mutch D, Anderson B: Randomized trial of cisplatin versus cisplatin plus mitolactol (Dibromodulcitol) versus cisplatin plus ifosfamide in advanced squamous carcinoma of the cervix: A Gynecologic Oncology Group Study. *J Clin Oncol* 15:165-171, 1997.
81. Alberts DS, Liu PY, Hannigan EV, O'Toole R, Williams SD, Young JA, Franklin EW, **Clarke-Pearson DL**, Malviya VK, Dubeshter B, Hoskins WJ, Adelson MD, Alvarez RD, O'Sullivan J, Garcia DJ, Sparks DB, Quade J, Rothenberg ML: Phase III study of intraperitoneal Cisplatin-intravenous Cyclophosphamide versus intravenous Cisplatin-intravenous cyclophosphamide in patients with optimal disease stage III ovarian cancer: A SWOG-GOG-EGOG Intergroup Study. *Int J Gynecol Cancer* 6 (1):28-29, 1996.
82. Rodriguez GC, Soper JT, Ho M, Dodge R, Berchuck A, **Clarke-Pearson DL**: A comparison of interrupted versus continuous Smead-Jones abdominal closure. *J Gynecol Tech* 2:19-23, 1996.
83. McGuire WP, Hoskins WJ, Brady M, Kucera PR, Partridge EE, Look KY, **Clarke-Pearson DL**, Davidson M: A phase III randomized study of Cyclophosphamide and Cisplatin versus Paclitaxel and Cisplatin in patients with suboptimal stage III and IV epithelial ovarian cancer. *N Engl J Med* 334:1-6, 1996.
84. Alberts DS, Liu PY, Hannigan EV, O'Toole R, William SD, Young JA, Franklin EW, **Clarke-Pearson DL**, Malviya VK, DuBeshter B, Adelson MD, Hoskins WJ: Intraperitoneal Cisplatin plus intravenous Cyclophosphamide versus intravenous Cisplatin plus intravenous Cyclophosphamide in stage III ovarian cancer. *N Engl J Med* 335:1950-55, 1996.
85. Kohler MF, Carney P, Dodge R, Soper JT, **Clarke-Pearson DL**, Marks JR, Berchuck A: p53 overexpression in advanced-stage endometrial adenocarcinoma. *Am J Obstet Gynecol* 175:1246-52, 1996.
86. Stehman FB, Bundy BN, Harrison B, **Clarke-Pearson DL**: Sites of failure and times to failure in carcinoma of the vulva treated conservatively: A Gynecologic Oncology Group study. *Am J Obstet Gynecol* 174 (4):1128-33, 1996.
87. Look KY, Brunetto VL, **Clarke-Pearson DL**, Averette HE, Major FJ, Alvarez RD, Homesley HD, Zaino RJ: An analysis of cell type in patients with surgically staged stage IB carcinoma of the cervix: A Gynecologic Oncology Group Study. *Gynecol Oncol* 63(3):304-311, 1996.
88. Olt G, Soper J, Ramakrishnan S, Xu F, Berchuck A, **Clarke-Pearson DL**, Dodge R, Bast RC Jr: Preoperative evaluation of macrophage colony stimulating factor levels (M-CSF) in patients with endometrial cancer. *Am J Obstet Gynecol* 174:1316-19, 1996.
89. Massad LS, Bitterman P, **Clarke-Pearson DL**: Case Report: Metastatic clear cell eccrine hidradenocarcinoma of the vulva: Survival after primary surgical resection. *Gynecol Oncol* 61:287-290, 1996.
90. Cliby WA, **Clarke-Pearson DL**, Dodge R, Kohler ME, Rodriguez GC, Olt GJ, Soper JT, Berchuck A, Soisson AP: Acute morbidity and mortality associated with selective pelvic and para- aortic lymphadenectomy in the surgical staging of endometrial adenocarcinoma. *J Gynecol Tech* 1:19-25, 1995.
91. Hurteau JA, Rodriguez GC, Kay HH, Bentley RC, **Clarke-Pearson DL**: Villoglandular adenocarcinoma of the cervix: A case report. *Obstet Gynecol* 85:906-908, 1995.
92. Moore DH, Valea F, Walton LA, Soper JT, **Clarke-Pearson DL**, Fowler WC, Jr.: A phase I study

of intraperitoneal-alpha2b interferon and intravenous cisplatin plus cyclophosphamide chemotherapy in patients with untreated stage III epithelial ovarian cancer: A Gynecologic Oncology Group pilot study. *Gynecol Oncol* 59:267-272, 1995.

93. Hurteau JA, Rodriguez G, Berchuck A, Soper JT, Cliby W, Soisson AP, **Clarke-Pearson, DL**: Closed retroperitoneal suction drainage compared to no drainage in patients having undergone selective lymphadenectomy: Risks and benefits. *J Gynecol Tech* (1) 4:195-199, 1995.
94. Weber TM, Sostman HD, Spritzer CE, Ballard RL, Meyer GA, **Clarke-Pearson DL**, Soper JT: Cervical carcinoma: Determination of recurrent tumor extent versus radiation changes with MR imaging. *Radiology* 194:135-139, 1995
95. Soper JT, Rodriguez G, Berchuck A, **Clarke-Pearson DL**: Long and short gracilis myocutaneous flaps for vulvovaginal reconstruction after radical pelvic surgery: Comparison of flap-specific complications. *Gynecol Oncol* 56:271, 1995.
96. LoCoco S, Covens A, Carney M, Franssen E, Dodge R, Rosen B, Osborne B, Kerr I, Buckman R, Soper J, Rodriguez G, DePetrillo A, **Clarke-Pearson DL**, Berchuck A: Does aggressive therapy improve survival in suboptimal stage IIIC/IV ovarian cancer? A Canadian-American comparative study. *Gynecol Oncol* 59:194-9, 1995.
97. Liu JR, Conaway M, Rodriguez GC, Soper JT, **Clarke-Pearson DL**, Berchuck A: Poor prognosis of black women with endometrial cancer is not due to delayed treatment. *Obstet Gynecol* 86:486-90, 1995.
98. Evans AC, **Clarke-Pearson DL**, Rodriguez GC, Berchuck A, Hammond CB: Gestational Trophoblastic Disease metastatic to the central nervous system. *Gyn Oncol* 59:226-230, 1995.
99. Hussein AM, Petros WP, Ross M, Vredenburg JJ, Affronti ML, Jones RB, Shpall EJ, Rubin P, Elkordky M, Gilbert C, Gupton C, Egorin MJ, Soper J, Berchuck A, **Clarke-Pearson DL**, Berry DA, Peters WA: A phase I/II study of high-dose cyclophosphamide, cisplatin, and thiotepa followed by autologous bone marrow and granulocyte colony-stimulating factor-primed peripheral blood progenitor cells in patients with advanced malignancies. *Cancer Chemotherapy and Pharmacology* 37:561-568, 1995.
100. Woolas RP, Conaway MR, Xu FJ, Jacobs IJ, Yu YJ, Daly L, Davies AP, O'Briant K, Berchuck A, Soper JT, **Clarke-Pearson DL**, Rodriguez G, Oram DH, Bast RC Jr: Combinations of multiple serum markers are superior to individual assays for discriminating malignant from benign pelvic masses. *Gynecol Oncol* 59:111-6, 1995.
101. Berchuck A, Anspach C, Evans AC, Soper JT, Rodriguez GC, Dodge R, Robboy S, **Clarke-Pearson DL**: Post-surgical surveillance of patients with FIGO stage I/II endometrial adenocarcinoma. *Gyn Onc* 59:20-24, 1995.
102. Soper JT, Evans AC, Rodriguez G, Berchuck A, **Clarke-Pearson DL**, Hammond CB: Etoposide-platin combination therapy for chemorefractory gestational trophoblastic disease. *Gynecol Oncol* 56:421-424, 1995.
103. Rodriguez GC, Hughes CL, Soper JT, Berchuck A, **Clarke-Pearson DL**, Hammond CB: Serum progesterone for the exclusion of early pregnancy in women at risk for recurrent gestational trophoblastic neoplasia. *Obstet Gynecol* 84:794-7, 1994.
104. Xu FJ, Yu YH, Daley L, Anselmino L, Hass GM, Berchuck A, Rodriguez GC, Soper JT, **Clarke-Pearson DL**, Hollis MS, Boyer C, Bast RC Jr.: OVX1 as a marker for early stage endometrial carcinoma. *Cancer* 73(7):1855-1858, 1994.
105. Soisson AP, Olt G, Soper JT, Berchuck A, Rodriguez GC, **Clarke-Pearson DL**: Prevention of

- superficial wound separation with subcutaneous retention sutures. *Gynecol Oncol* 51:330-4, 1994.
106. Lukes A, Kohler MF, Pieper CF, Kerns BJ, Bentley R, Rodriguez GC, Soper JT, **Clarke-Pearson DL**, Bast RC Jr., Berchuck A: Multivariate analysis of DNA ploidy, p53, and HER-2/neu as prognostic factors in endometrial cancer. *Cancer* 79:2380-85, 1994.
107. Soper JT, **Clarke-Pearson DL**, Berchuck A, Rodriguez G, Hammond CB: 5-Day Methotrexate for Women with Metastatic Gestational Trophoblastic Disease. *Gynecol Oncol* 54:76-79, 1994.
108. Ben-Haim S, Kahn D, Weiner GJ, Madsen MT, Waxman AD, Williams CM, **Clarke-Pearson DL**, Coleman ER, Maguire RT: The safety and pharmacokinetics in adult subjects of an intravenously administered 99mTc-labeled 17 amino acid peptide (CYT-379). *Nucl Med Biol* 21(2):131-142, 1994.
109. Rodriguez GC, **Clarke-Pearson DL**, Soper JT, Berchuck A, Synan I, Dodge RK: The negative prognostic implications of thrombocytosis in women with Stage IB cervical cancer. *Obstet Gynecol* 83:445-448, 1994.
110. Myers ER, **Clarke-Pearson DL**, Olt GJ, Soper JT, Berchuck A: Preoperative coagulation testing b. on a gynecologic oncology service. *Obstet Gynecol* 83:438-444, 1994.
111. Berchuck A, Kohler MF, Hopkins MP, Humphrey PA, Robboy SJ, Rodriguez GC, Soper JT, **Clarke-Pearson DL**, Bast RC: Overexpression of p53 is not a feature of benign and early-stage borderline epithelial ovarian tumors. *Gynecol Oncol* 52:232-236, 1994.
112. Soper JT, Evans AC, **Clarke-Pearson DL**, Berchuck A, Rodriguez G, Hammond CB: Alternating weekly chemotherapy with etoposide-methotrexate-dactinomycin/cyclophosphamide-vincristine for high-risk gestational trophoblastic disease. *Obstet Gynecol* 83(1):113-117, 1994.
113. Woolas R, Xu FJ, Daly L, Soper JT, Berchuck A, Rodriguez G, **Clarke-Pearson DL**, Boyer CM, Bast RC Jr: Screening strategies for ovarian cancer. *Diag Oncol* 3:287-293, 1993.
114. Woolas RP, Xu FJ, Jacobs IJ, Yu YH, Daly L, Berchuck A, Soper JT, **Clarke-Pearson DL**, Oram DH, Bast RC Jr: Elevation of multiple serum markers in patients with Stage I ovarian cancer. *J Nat Can Inst* 85:1748-1751, 1993.
115. Kohler MF, Nishii H, Humphrey PA, Sasaki H, Boyd JA, Marks J, Bast RC, **Clarke-Pearson DL**, Berchuck A.: Mutation of the p53 tumor suppressor gene is not a feature of endometrial hyperplasias. *Am J Obstet Gynecol* 169:690-4, 1993.
116. Leopold KA, Oleson JR, **Clarke-Pearson DL**, Soper JT, Berchuck A, Samulski T, Page RL, Bliven J, Dewhirst M: Intraperitoneal cisplatin and regional hyperthermia for ovarian carcinoma. *Int J Radiat Oncol Biol Phys* 27:1245, 1993.
117. Kohler MF, Marks JR, Wiseman RW, Jacobs IJ, Davidoff AM, **Clarke-Pearson DL**, Soper JT, Bast RC Jr, Berchuck A: Spectrum of mutation and frequency of allelic deletion of the p53 gene in ovarian cancer. *J Natl Cancer Inst* 85:1513-1519, 1993.
118. Xu FJ, Yu Y, Daley C, DeSombre K, Hass M, Anselmino L, Berchuck A, Soper JT, **Clarke-Pearson DL**, Boyer C, Layfield LJ, Bast RC: The OVX1 radioimmunoassay complements CA125 for predicting the presence of residual ovarian carcinoma at second look surgical surveillance procedures. *J Clin Oncol*, 11:1506-1510, 1993.
119. **Clarke-Pearson DL**, Synan IS, Dodge R, Soper JT, Berchuck A, Coleman RE: A randomized trial of low-dose heparin and intermittent pneumatic calf compression for the prevention of deep venous thrombosis after gynecologic oncology surgery. *Am J Obstet Gynecol* 168:1146-54, 1993.

120. Asbury RF, Blessing JA, Look KY, **Clarke-Pearson DL**, Homesley HD: A Gynecologic Oncology Group phase II study of AMONAFIDE in epithelial ovarian cancer. *Am J Clin Oncol* 16(6):529-531, 1993.
121. Boente MP, Berchuck A, Whitaker RS, Kalen A, Xu FJ, **Clarke-Pearson DL**, Bell RM, Bast RC Jr.: Antibodies against immunochemically distinct epitopes on the extracellular domain of HER-2/neu c-cerbB-2 inhibit growth of breast and ovarian cancer cell lines. *Int J Cancer* 53:401-408, 1993.
122. Kohler MF, Berchuck A, Davidoff AM, Humphrey PA, Iglehart JD, Soper JT, **Clarke-Pearson DL**, Bast RC Jr., Marks JR: Overexpression and mutation of p53 in endometrial cancer. *Cancer Res* 52:1622-27, 1992.
123. Soisson AP, Soper JT, Berchuck A, Dodge R, **Clarke-Pearson DL**: Radical hysterectomy in obese women. *Obstet Gynecol* 80:940, 1992.
124. Boente MP, Berchuck A, Rodriguez GC, Davidoff A, Whitaker R, Xu FJ, Marks J, **Clarke-Pearson DL**, Bast RC Jr: The effect of interferon gamma on epidermal growth factor receptor expression in normal and malignant ovarian epithelial cells. *Amer J Obstet Gynecol* 167:1877-1882, 1992.
125. Soper JT, Johnson P, Johnson V, Berchuck A, **Clarke-Pearson DL**: Comprehensive restaging laparotomy in women with apparent early ovarian carcinoma. *Obstet Gynecol* 80(6):949-952, 1992.
126. Olt G, Berchuck A, Soisson AP, Boyer C, Bast RC, **Clarke-Pearson DL**: Fibronectin is an immunosuppressive substance associated with epithelial ovarian cancer. *Cancer* 70:2137-42, 1992.
127. Rodriguez GC, Soper JT, Berchuck A, Oleson J, Dodge R, Montana G, **Clarke-Pearson DL**: Improved palliation of cerebral metastases in epithelial ovarian cancer using a combined modality approach including radiation therapy, chemotherapy, and surgery. *J Clin Oncol* 10:1553-1560, 1992.
128. Soper JT, Berchuck A, Dodge R, **Clarke-Pearson DL**: Adjuvant therapy with intraperitoneal chomic phosphate (32P) in women with early ovarian carcinoma after comprehensive surgical staging. *Obstet Gynecol* 79:993-7, 1992.
129. Montana GS, Anscher MS, Mansbach CM, Daly N, Delannes M, **Clarke-Pearson DL**, Gaydica EF: Topical application of WR-2721 to prevent radiation proctosigmoiditis. A phase I/II trial. *Cancer* 69:2826-2830, 1992
130. Berchuck A, Boente MP, Soper JT, Kerns BJ, Kinney RJ, **Clarke-Pearson DL**, Bacus SS, Bast RC Jr: Ploidy analysis of epithelial ovarian cancers using image cytometry. *Gynecol Oncol* 44:61- 65, 1992.
131. Berchuck A, Rodriguez G, Olt GJ, Boente MP, Whitaker R, Arrick B, **Clarke-Pearson DL**, Bast RC Jr: Regulation of growth of normal ovarian epithelial cells and ovarian cancer cell lines by transforming growth factor-beta. *Am J Obstet Gynecol* 166(2):676-84, 1992.
132. O'Briant K, Chrysson N, Hunter V, Tyson F, Tanner M, Daly L, George SL, Berchuck A, Soper J, Fowler W, **Clarke-Pearson DL**, Bast RC: Ha-ras polymorphisms in epithelial ovarian cancer. *Gynecol Oncol* 45:299, 1992.
133. Slayton RE, Blessing JA, **Clarke-Pearson DL**: A phase II clinical trial of Diaziquone (AZQ) In the treatment of patients with recurrent mixed mesodermal sarcomas of the uterus. A Gynecologic Oncology Group Study. (Brief Report) *Investigational New Drugs* 9:93-94, 1991.
134. Massad LS, Hunter VJ, Szpak CA, **Clarke-Pearson DL**, Creasman WT: Epithelial ovarian tumors

of low malignant potential. *Obstet Gynecol* 78(6):1027-1032, 1991.

135. Livengood CH, Soper JT, **Clarke-Pearson DL**, Addison WA: Necrotizing fasciitis in irradiated tissues of diabetic patients. *J Reprod Med* 36:455-458, 1991.
136. Stellar MA, Soper JT, Szpak CA, Lanman JT, **Clarke-Pearson DL**: The importance of determining karyotype in premenarchal females with gonadal dysgerminoma: Two case reports. *Int J Gynecol Cancer* 1:141, 1991.
137. Berchuck A, Rodriguez GC, Kamel A, Dodge RK, Soper JT, **Clarke-Pearson DL**, Bast RC Jr: Epidermal growth factor receptor expression in normal ovarian epithelium and ovarian cancer. I. Correlation of receptor expression with prognostic factors in patients with ovarian cancer. *Am J Obstet Gynecol* 164:669-674, 1991.
138. Berchuck A, Rodriguez GC, Kinney RB, Soper JT, **Clarke-Pearson DL**, Bast RC Jr: Overexpression of HER-2/neu in endometrial cancer is associated with advanced stage disease. *Am J Obstet Gynecol* 164:15-21, 1991.
139. Soper JT, Berchuck A, **Clarke-Pearson DL**: Adjuvant intraperitoneal chronic phosphate therapy for women with apparent early ovarian carcinoma who have not undergone comprehensive surgical staging. *Cancer* 68:725-729, 1991.
140. Soper JT, Couchman G, Berchuck A, **Clarke-Pearson DL**. The role of partial sigmoid colectomy for debulking epithelial ovarian carcinoma. *Gynecol Oncol* 41:239-44, 1991.
141. Marks JR, Davidoff AM, Kerns BJ, Pence J, Dodge RK, Humphrey PA, **Clarke-Pearson DL**, Iglehart JD, Bast RC Jr, Berchuck A: Overexpression and mutation of p53 in epithelial ovarian cancer. *Cancer Res* 51:2979-84, 1991.
142. Rodriguez GC, Berchuck A, Whitaker RS, Schlossman D, **Clarke-Pearson DL**, Bast RC Jr: Epidermal growth factor receptor expression in normal ovarian epithelium and ovarian cancer. II. Relationship between receptor expression and response to epidermal growth factor. *Am J Obstet Gynecol* 164:745-50, 1991.
143. Kohler MF, Soper JT, Tucker JA, **Clarke-Pearson DL**: Isolated incisional metastases after intraperitoneal radioactive chronic phosphate therapy for ovarian carcinoma. *Cancer* 68:1380-83, 1991.
144. Xu FJ, Ramakrishnan S, Daly L, Soper JT, Berchuck A, **Clarke-Pearson DL**, Bast RC Jr: Increased serum levels of macrophage colony stimulating factor in ovarian cancer. *Am J Obstet Gynecol* 165:1356-1362, 1991.
145. Cliby W, Soisson AP, Berchuck A, **Clarke-Pearson DL**: Stage I small cell carcinoma of the vulva treated with vulvectomy, lymphadenectomy, and adjuvant chemotherapy. *Cancer* 67:2415- 2417, 1991.
146. Berchuck A, Kamel A, Whitaker R, Kerns B, Olt G, Kinney R, Soper JT, Dodge R, **Clarke-Pearson DL**, Marks P, McKenzie S, Yin S, Bast RC Jr: Overexpression of HER-2/neu is associated with poor survival in advanced epithelial ovarian cancer. *Cancer Res* 50:4087-91, 1990.
147. Shpall EJ, **Clarke-Pearson DL**, Soper JT, Berchuck A, Jones RB, Bast RC Jr., Ross M, Lidor Y, Vanacek K, Tyler T, Peters WP: High-dose alkylating agent chemotherapy with autologous bone marrow support in patients with stage III/IV epithelial ovarian cancer. *Gynecol Oncol* 38:386-391, 1990.
148. Berchuck A, Rodriguez G, Kamel A, Soper JT, **Clarke-Pearson DLL**, Bast RC Jr: Expression of epidermal growth factor receptor and HER-2/neu in normal and neoplastic cervix, vulva, and

vagina. *Obstet Gynecol* 76:381-387, 1990.

149. Kohler MF, Berchuck A, Baker ME, Szpak CA, Soper JT, **Clarke-Pearson DL**: Computed tomography guided fine-needle aspiration of retroperitoneal lymph nodes in gynecologic oncology. *Obstet Gynecol* 76:612-616, 1990.
150. Hunter VJ, Daly L, Helms M, Soper JT, Berchuck A, **Clarke-Pearson DL**, Bast RC Jr: The prognostic significance of CA-125 half-life in patients with ovarian cancer who have received primary chemotherapy after surgical cytoreduction. *Am J Obstet Gynecol* 163:1164-1167, 1990.
151. Soper JT, Berchuck A, Olt GJ, Soisson AP, **Clarke-Pearson DL**, Bast JC Jr.: Preoperative evaluation of serum CA-125, TAG-72, and CA-15-3 in patients with endometrial carcinoma. *Am J Obstet Gynecol* 163:1204-1209, 1990.
152. Soisson AP, Geszler J, Soper JT, Berchuck A, **Clarke-Pearson DL**: A comparison of c. symptomatology, physical examination, and vaginal cytology in detection of recurrent cervical carcinoma after radical hysterectomy. *Obstet Gynecol* 76:106, 1990.
153. Berchuck A, Olt GJ, Soisson AP, Kamel A, Soper JT, Boyer CM, **Clarke-Pearson DL**, Leslie DS, Bast RC Jr: Heterogeneity of antigen expression in advanced epithelial ovarian cancer. *Am J Obstet Gynecol* 162:883-888, 1990.
154. **Clarke-Pearson DL**, DeLong E, Synan IS, Soper JT, Creasman WT, Coleman RE: A controlled trial of two low-dose heparin regimens for the prevention of postoperative deep vein thrombosis. *Obstet Gynecol* 75:684-689, 1990.
155. Mutch DG, Soper JT, Babcock CJ, Christensen CW, **Clarke-Pearson DL**, Hammond CB: Recurrent gestational trophoblastic disease: Experience of the Southeastern Trophoblastic Disease Center. *Cancer* 66:978, 1990.
156. Olt GJ, Greenberg C, Synan IS, Coleman RE, **Clarke-Pearson DL**: Preoperative assessment of fragment D-Dimer as a predictor of postoperative venous thrombosis. *Am J Obstet Gynecol* 162:772-775, 1990.
157. Soisson AP, Soper JT, **Clarke-Pearson DL**, Berchuck A, Montana GS, Creasman WT: Adjuvant radiotherapy following radical hysterectomy for patients with stage IB and IIA cervical cancer. *Gynecol Oncol* 37:390, 1990.
158. Bentel GC, Oleson JR, **Clarke-Pearson DL**, Soper JT, Montana GS: Transperineal templates for brachytherapy treatment of pelvic malignancies: A comparison of standard and customized templates. *Biol Phys* 19:751, 1990.
159. Bentel GC, Oleson JR, **Clarke-Pearson DL**, Soper JT, Montana GS: Transperineal templates for brachytherapy treatment of pelvic malignancies: A comparison of standard and customized templates. *Biol Phys* 19:751, 1990.
160. King ME, DiGiovanni LM, Yong FF, **Clarke-Pearson DL**: Immature teratoma of the ovary, Grade 3, with karyotype analysis. *Int J Gynecol Pathol* 9:178-184, 1990.
161. Fu SF, **Clarke-Pearson DL**: Complications of intraperitoneal port-a-cath for treatment of ovarian carcinoma. *Taiwan Med J* 32:521-526, 1989.
162. Soper JT, Larson D, Hunter VJ, Berchuck A, **Clarke-Pearson DL**. Short gracilis myocutaneous flaps for vulvovaginal reconstruction after radical pelvic surgery. *Obstet Gynecol* 74:823-827, 1989.
163. Berchuck A, Soisson AP, Olt GJ, Soper JT, **Clarke-Pearson DL**, Bast RC Jr, McCarty KS Jr: Epidermal growth factor receptor expression in normal and malignant endometrium. *Am J Obstet*

Gynecol 161:1247-1252, 1989.

164. Soisson AP, Berchuck A, Lessey BA, Soper JT, **Clarke-Pearson DL**, McCarty KS Jr, Bast RC Jr: Immunohistochemical expression of Tag-72 in normal and malignant endometrium: Correlation of antigen expression with estrogen receptor and progesterone receptor levels. *Am J Obstet Gynecol* 161:1258-1263, 1989.
165. Berchuck A, Soisson AP, Soper JT, **Clarke-Pearson DL**, Bast RC Jr, McCarty KS Jr: Reactivity of epidermal growth factor receptor monoclonal antibodies with human uterine tissues. *Arch Pathol Lab Med* 113:1155-1158, 1989.
166. Soper JT, Berchuck A, Creasman WT, **Clarke-Pearson DL**: Pelvic exenteration: Factors associated with major surgical morbidity. *Gynecol Oncol* 35:93-98, 1989.
167. Berchuck A, Soisson AP, **Clarke-Pearson DL**, Soper JT, Boyer CM, Kinney RT, McCarty KS, Bast RC: Immunohistochemical expression of CA 125 in endometrial adenocarcinoma: Correlation of antigen expression with metastatic potential. *Cancer Res* 49:2091-2095, 1989.
168. **Clarke-Pearson DL**, DeLong ER, Chin N, Rice R, Creasman WT: Intestinal obstruction in patients with ovarian cancer: variables associated with surgical complications and survival. *Arch Surg* 123:42-45, 1988.
169. Soper JT, Blaszyk TM, Oke TZ, **Clarke-Pearson DL**, Creasman WT: Percutaneous nephrostomy in gynecologic oncology patients. *Am J Obstet Gynecol* 158:1126-1131, 1988.
170. DeLong ER, DeLong DM, **Clarke-Pearson DL**: Comparing the areas under two or more correlated receiver operating characteristic curves: A nonparametric approach. *Biometrics* 44:837- 845, 1988.
171. Soper JT, Mutch DG, Chin N, **Clarke-Pearson DL**, Hammond CB: Renal metastases of gestational trophoblastic disease: A report of eight cases. *Obstet Gynecol* 72:797-798, 1988.
172. **Clarke-Pearson DL**, Soper JT, Creasman WT: Absorbable synthetic mesh (910-polyglactin) for creation of a pelvic "lid" following pelvic exenteration. *Am J Obstet Gynecol* 158:158-160, 1988.
173. Soper JT, **Clarke-Pearson DL**, Creasman WT: Absorbable synthetic mesh (910-polyglactin) intestinal sling to reduce radiation-induced small bowel injury in patients with pelvic malignancies. *Gynecol Oncol* 29:283-289, 1988.
174. Soper JT, **Clarke-Pearson DL**, Hammond CB: Metastatic gestational trophoblastic disease: Prognostic factors in previously untreated patients. *Obstet Gynecol* 71:338-343, 1988.
175. **Clarke-Pearson DL**, DeLong ER, Chin N, Rice R, Creasman WT: Intestinal obstruction in patients with ovarian cancer: Variables associated with surgical complications and survival. *Arch Surg* 123:42-45, 1988.
176. Bandy LC, **Clarke-Pearson DL**, Soper JT, Mutch DG, MacMillan J, Creasman WT: Long-term effects on bladder function following radical hysterectomy with and without postoperative radiation. *Gynecol* 26:160, 1987.
177. Soper JT, Wilkinson RH, Bandy LC, **Clarke-Pearson DL**, Creasman WT: Intraperitoneal chromic phosphate P32 as salvage therapy for persistent carcinoma of the ovary after surgical restaging. *Am J Obstet Gynecol* 156:1153, 1987.
178. **Clarke-Pearson DL**, DeLong ER, Synan IS, Coleman RE, Creasman WT: Variables associated with postoperative deep venous thrombosis: A prospective study of 411 gynecology patients and creation of a prognostic model. *Obstet Gynecol* 69:146-150, 1987.

179. **Clarke-Pearson DL**, Chin N, DeLong ER, Rice R, Creasman WT: Surgical management of intestinal obstruction in ovarian cancer: I. Clinical features, postoperative complication, and survival. *Gynecol Oncol* 26:11-18, 1987.
180. Creasman WT, Soper JT, **Clarke-Pearson DL**: Radical hysterectomy as therapy for early carcinoma of the cervix. *Am J Obstet Gynecol* 155:964-969, 1986.
181. **Clarke-Pearson DL**, Bandy L, Dudzinski M, Heaston D, Creasman WT: Computed tomography in evaluation of patients with ovarian carcinoma in complete clinical remission: correlation with surgical pathologic findings. *JAMA* 255:627-630, 1986.
182. Mutch DG, Soper JT, Baker ME, Bandy L, Cox EB, **Clarke-Pearson DL**, Hammond CB: The role of computerized axial tomography of the chest in staging patients with nonmetastatic gestational trophoblastic disease. *Obstet Gynecol* 68:348-352, 1986.
183. Creasman WT, Henderson D, **Clarke-Pearson DL**, Hinshaw WM: Estrogen replacement therapy in the patient treated for endometrial cancer. *Obstet Gynecol* 67:326-330, 1986.
184. Puleo J, **Clarke-Pearson DL**, Smith E, Barnard D, Creasman W: Superior vena cava syndrome associated with gynecologic malignancy. *Gynec Onc* 23:59-64, 1986.
185. Creasman WT, Soper JT, McCarty KS Jr, McCarty KS Sr, Hinshaw WM, **Clarke-Pearson DL**: Influence of cytoplasmic steroid receptor content on prognosis of early stage endometrial carcinoma. *Am J Obstet Gynecol* 151:7, 922-932, 1985.
186. Soper JT, Creasman WT, **Clarke-Pearson DL**, Sullivan DC, Vergadoro F, Johnston WW: Intraperitoneal chromic phosphate P32 suspension therapy of malignant peritoneal cytology in endometrial carcinoma. *Am J Obstet Gynecol* 153:191-196, 1985.
187. Creasman WT, Fetter BF, **Clarke-Pearson DL**, Kaufman L, Parker RT: Management of Stage IA carcinoma of the cervix. *Am J Obstet Gynecol* 153:164-171, 1985.
188. Barter JF, Smith EB, Szpak CA, Hinshaw WM, **Clarke-Pearson DL**, Creasman WT: Leiomyosarcoma of the uterus: Clinicopathologic study of 21 cases. *Gynecol Oncol* 21:220-227, 1985.
189. **Clarke-Pearson DL**, Coleman RE, Siegel R, Synan IS, Petry N: Indium 111 platelet imaging for the detection of deep venous thrombosis and pulmonary embolism in patients without symptoms after surgery. *Surg* 98:98-103, 1985.
190. Bandy L, **Clarke-Pearson DL**, Hammond CB: Pseudoobstruction of the colon complicating choriocarcinoma. *Gynecol Oncol* 20:402-407, 1985.
191. **Clarke-Pearson DL**, Creasman WT: A clinical evaluation of absorbable polydioxanone ligating clips in abdominal and pelvic operations. *Surg Gynecol Obstet* 161:250-252, 1985.
192. Bandy L, **Clarke-Pearson DL**, Silverman PM, Creasman WT: Computed tomography in evaluation of extra pelvic lymphadenopathy in carcinoma of the cervix. *Obstet Gynecol* 65:73-76, 1985.
193. Fortier KJ, **Clarke-Pearson DL**, Creasman WT, Johnston WW: Fine Needle Aspiration in Gynecology: Evaluation of extra pelvic lesions in patients with gynecologic malignancy. *Obstet Gynecol* 65:76-72, 1985.
194. Zern RA, **Clarke-Pearson DL**: Pneumatosis intestinalis associated with enteral feeding by catheter jejunostomy. *Obstet Gynecol* 65:81S-83, 1985.
195. Soper JT, McCarty KS Jr, Creasman WT, **Clarke-Pearson DL**, McCarty KS Sr: Induction of

- cytoplasmic progesterone receptor in human endometrial carcinoma transplanted into nude mice. *Am J Obstet Gynecol* 150:437, 1984.
196. Smith EB, **Clarke-Pearson DL**, Creasman WT: A VP-16-213 and cisplatin containing regimen for treatment of refractory ovarian germ cell malignancies. *Am J Obstet Gynecol* 150:927-931, 1984.
197. **Clarke-Pearson DL**, DeLong ER, Synan IS, Creasman WT: Complications of low-dose heparin prophylaxis in gynecologic oncology surgery. *Obstet Gynecol* 64:689-694, 1984.
198. Bandy L, **Clarke-Pearson DL**, Hammond CB: Malignant potential of gestational trophoblastic disease at the extreme ages of reproductive life. *Obstet Gynecol* 64:395-399, 1984.
199. Soper JT, McCarty KS Jr, Hinshaw WM, Creasman WT, McCarty KS Sr, **Clarke-Pearson DL**: Cytoplasmic estrogen and progesterone receptor content of uterine sarcomas. *Am J Obstet Gynecol* 150:342-348, 1984.
200. **Clarke-Pearson DL**, Coleman RE, Petry N, Synan IS, Creasman WT: Postoperative pelvic vein thrombosis and pulmonary embolism detected by indium 111-labeled platelet imaging: A case report. *Am J Obstet Gynecol* 149:796-798, 1984.
201. Gore M, Miller KE, Soong S, **Clarke-Pearson DL**, Pizzo SV: Vascular plasminogen activator levels and thromboembolic disease in patients with gynecologic malignancies. *Am J Obstet Gynecol* 149:830-834, 1984.
202. **Clarke-Pearson DL**, Synan IS, Coleman RE, Hinshaw WM, Creasman WT: The natural history of venous thromboemboli in gynecologic oncology: A prospective study of 382 patients. *Am J Obstet Gynecol* 148:1051, 1984.
203. Creasman WT, Hinshaw WM, **Clarke-Pearson DL**: Cryosurgery in the management of cervical intraepithelial neoplasia. *Obstet Gynecol* 63:145-149, 1984.
204. **Clarke-Pearson DL**, Synan IS, Hinshaw WM, Coleman RE, Creasman WT: Prevention of postoperative venous thromboembolism by external pneumatic calf compression in patients with gynecologic malignancy. *Obstet Gynecol* 63:92-98, 1984.
205. **Clarke-Pearson DL**, Creasman WT, Coleman RE, Synan IS, Hinshaw WM: Perioperative external pneumatic calf compression as thromboembolism prophylaxis in gynecology: Report of a randomized controlled trial. *Gynecol Oncol* 18:226-232, 1984.
206. Bandy L, **Clarke-Pearson DL**, Creasman WT: Vitamin B12 deficiency following therapy in gynecologic oncology. *Gynecol Oncol* 17:370-374, 1984.
207. **Clarke-Pearson DL**, Synan IS, Creasman WT: Anticoagulation therapy for venous thromboembolism in patients with gynecologic malignancy. *Am J Obstet Gynecol* 147:369-375, 1983.
208. **Clarke-Pearson DL**, Coleman RE, Synan IS, Hinshaw W, Creasman WT: Venous thromboembolism prophylaxis in gynecologic oncology: A prospective, controlled trial of low-dose heparin. *Am J Obstet Gynecol* 145:606-613, 1983.
209. **Clarke-Pearson DL**, Jelovsek FR, Creasman WT: Thromboembolism complicating surgery for cervical and uterine malignancy: Incidence, risk factors and prophylaxis. *Obstet Gynecol* 61:87-94, 1983.
210. **Clarke-Pearson DL**, Coleman RE, Ralston M, Creasman WT: Indium-labeled platelet imaging of postoperative pelvic vein thrombi. *Obstet Gynecol* 62:109-116, 1983

211. **Clarke-Pearson DL**, Synan IS, Creasman WT: Significant venous thromboembolism caused by pelvic lymphocysts: Diagnosis and management. *Gynecol Oncol* 13:136, 1982.
212. Creasman WT, **Clarke-Pearson DL**, Weed JC, Jr: Results of outpatient therapy of cervical intraepithelial neoplasia. *Gynecol Oncol* 12:306-316, 1981.
213. **Clarke-Pearson DL**, Creasman WT: Diagnosis of deep venous thrombosis in obstetrics and gynecology by impedance phlebography. *Obstet Gynecol* 58:52, 1981.
214. **Clarke-Pearson DL**, Jelovsek FR: Alterations of occlusive cuff impedance plethysmography results in the obstetric patient. *Surg* 89:594, 1981.
215. **Clarke-Pearson DL**: Low-dose heparin in prevention of deep venous thrombosis. *Am J Obstet Gynecol* 138:471, 1980.
216. Wheeler HB, **Pearson DL**, O'Connell D, Mullick SC: Impedance phlebography: Technique, interpretation, and results. *Arch Surg* 104:164, 1972.
217. Wheeler HB, Mullick SC, Anderson JM, **Pearson DL**: Diagnosis of occult deep vein thrombosis by a noninvasive bedside technique. *Surg* 70:20, 1971.

#### Other peer reviewed publications

1. Parker WH, Berek JS, Pritts EA, Olive D, Chalas E, **Clarke-Pearson DL**. Regarding "Incidence of Occult Uterine Malignancy Following Vaginal Hysterectomy with Morcellation". *J Minim Invasive Gynecol*. 2018; 25: 187-188
2. Parker W, Berek JS, Pritts E, Olive D, Kaunitz AM, Chalas E, **Clarke-Pearson D**, et al. An Open Letter to the Food and Drug Administration Regarding the Use of Morcellation Procedures in Women Having Surgery for Presumed Uterine Myomas. *J Minim Invasive Gynecol*. 2016; 23: 303-08.
3. Parker WH, Kaunitz AM, Pritts EA, Olive DL, Chalas E, **Clarke-Pearson DL**, Berek JS. (for the Leiomyoma Morcellation Study Group). U.S. Food and Drug Administration's Guidance Regarding Morcellation of Leiomyoma: Well- Intentioned, but is it Harmful for Women? *Obstet Gynecol*. 2015.
4. **Clarke-Pearson DL**, Barber EL. Venous thromboembolism in gynecologic surgery: Are we any closer to determining an optimal prophylaxis regimen? (Editorial) *Gynecol Oncol*. 2015; 138:495- 6
5. Rossi E, **Clarke-Pearson DL**. Screening for Ovarian Cancer in Midlife Women. *The Female Patient*. 2011; 36: 37-40.
6. **Clarke-Pearson DL**. Clinical practice. Screening for ovarian cancer. *N Engl J Med*. 2009; 361(2):170-7
7. Alvarez A, **Clarke-Pearson DL**. Platinum-Resistant and Refractory Ovarian Cancer: Second-Line Treatment Options. *Am J Cancer* 2003; 2: 1-13.
8. Soper JT, Evans AC, Conaway MR, **Clarke-Pearson DL**, Berchuck A, Hammond CB: Evaluation of prognostic factors and staging in gestational trophoblastic tumor. *Gest Tropho Tumor* 84(6):969-973, 1994.
9. Woolas R, Xu FJ, Jacobs IJ, Yu YH, Daly L, Berchuck A, Soper JT, **Clarke-Pearson DL**, Oram DH, Bast RC Jr: Screening strategies for ovarian cancer. *Diag Oncol* 3:287-293, 1993.

10. Nicholaides AN, Areelus J, Belcaro G, Bergqvist D, Borris LC, Buller HR, Caprini JA, Christopoulos D, **Clarke-Pearson D**, et al: Prevention of venous thromboembolism: European consensus statement. *Int Angiology* II:151-159, 1992.
11. **Clarke-Pearson DL**, Hume RF: Venous thromboembolic disease in Obstetrics and Gynecology: Prevention, diagnosis and treatment. *Curr Probl Obstet Gynecol Fertil* 12:38-63,1989.
12. **Clarke-Pearson DL**, Olt G: Thromboembolism in patients with gynecologic tumors: Risk factors, natural history and prophylaxis. *Oncol* 3:39-44, 1989.
13. Beckmann CRB, **Clarke-Pearson DL**, Evenhouse R: A reusable plastic training model for teaching Papanicolaou smear technique. *Am J Obstet Gynecol* 157:259-260, 1987.
14. Creasman WT, **Clarke-Pearson DL**, Ashe CA, Weed JC Jr: The abnormal pap smear: What to do next. *Cancer* 48:515, 1981.

**ACOG Committee Opinions published during tenure as ACOG Gynecologic Management Committee Chair:**

1. Performance enhancing anabolic steroid abuse in women. Committee Opinion No. 484. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;117:1016–18.
2. Understanding and using the U.S. Medical Eligibility Criteria for Contraceptive Use, 2010. Committee Opinion No. 505. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;118:754–60.
3. Expedited partner therapy in the management of gonorrhea and chlamydia by obstetrician–gynecologists. Committee Opinion No. 506. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;118:761–6.
4. Management of vulvar intraepithelial neoplasia. Committee Opinion No. 509. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;118:1192–4.
5. Vaginal placement of synthetic mesh for pelvic organ prolapse. Committee Opinion No. 513. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2011;118:1459–64.
6. Compounded bioidentical menopausal hormone therapy. Committee Opinion No. 532. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:411–5.
7. Well-woman visit. Committee Opinion No. 534. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:421–4.
8. Reprocessed single-use devices. Committee Opinion No. 537. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:974–6.
9. Risk of venous thromboembolism among users of drospirenone-containing oral contraceptive pills. Committee Opinion No. 540. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:1239–42.
10. Over-the-counter access to oral contraceptives. Committee Opinion No. 544. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:1527-31.
11. Postmenopausal estrogen therapy: route of administration and risk of venous thromboembolism. Committee Opinion No. 556. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013;121:887–90.

12. Management of acute abnormal uterine bleeding in nonpregnant reproductive-aged women. Committee Opinion No. 557. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;121:891–6.
13. Integrating immunizations into practice. Committee Opinion No. 558. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;121:897–903.

**Developed during tenure as Committee Chair:**

1. Female age-related fertility decline. Committee Opinion No. 589. American College of Obstetricians and Gynecologists. Obstet Gynecol 2014;123:719–21.
2. Hormone therapy and heart disease. Committee Opinion No. 565. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;121:1407–10.
3. Professional liability and gynecology-only practice. Committee Opinion No. 567. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:186.
4. Solutions for surgical preparation of the vagina. Committee Opinion No. 571. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:718–20.
5. Understanding and using the U.S. Selected Practice Recommendations for Contraceptive Use, 2013. Committee Opinion No. 577. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:1132–3.
6. Von Willebrand disease in women. Committee Opinion No. 580. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:1368–73.
7. Addressing health risks of noncoital sexual activity. Committee Opinion No. 582. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:1378–83.

**Editorials and Letters**

1. **Clarke-Pearson DL**, Geller EJ. Complications of Hysterectomy. Obstet Gynecol 2013; 121:1-21.
2. **Clarke-Pearson DL**. Thromboprophylaxis in Gynecologic Surgery: Why are we Stuck in 1975? Obstet Gynecol 2011; 118: 973.
3. Martino M, Rajaram L, Maxwell GL, **Clarke-Pearson DL**. Combination Prophylaxis for Thromboembolism Prevention among Gynecologic Oncology Patients Perioperatively. (Letter) Gynecol Oncol 2008; 109: 426-27.
4. **Clarke-Pearson DL**: Prevention of venous thrombosis following gynecologic Surgery. J Gynecol Tech 1(1):11-17, 1995.
5. **Clarke-Pearson DL**: Crafting the operative note: techniques critical to success (editorial). J Gynecol Tech 1(3):119-120, 1995.
6. **Clarke-Pearson, DL**: Reassessment of ovarian cancer: What are our goals? Gynecol Oncol 52:151-153, 1994.
7. Soper JT, **Clarke-Pearson DL**, Berchuck A: The clinical significance of blood transfusion at the time of radical hysterectomy. (Letter). Obstet Gynecol 77:165, 1991.

8. **Clarke-Pearson DL**: The importance of calf vein thrombosis. N Eng J Med 302:752, 1980.

#### Published Abstracts

1. Barber EL, **Clarke-Pearson DL**. Risk of venous thromboembolism in minimally invasive versus open hysterectomy for endometrial cancer. SGO Annual Meeting 2016.
2. Barber EL, Gehrig PA, **Clarke-Pearson DL**. A risk assessment score for postoperative VTE among patients undergoing minimally invasive surgery for gynecologic cancer. SGO Annual Meeting 2016.
3. Barber EL, **Clarke-Pearson DL**. Validity of currently available venous thromboembolism risk scores among gynecologic oncology patients.
4. Look K, Brunetto VL, **Clarke-Pearson DL**, Averette H, Major FJ, Alvarez RD, Homesley HD, Zaino R: An analysis of cell type in patients with surgically stages stage IB carcinoma of the cervix: A Gynecologic Oncology Group (GOG) Study. Abstract. Gynecol Oncol 60:117, 1996.
5. Omura GA, Blessing J, Vaccarello L, Berman M, Mutch D, **Clarke-Pearson DL**, Anderson B: A randomized trial of Cisplatin versus Cisplatin + Mitolactol versus Cisplatin + Ifosfamide in advanced squamous carcinoma of the cervix by the Gynecologic Oncology Group (GOG). Abstract. Gynecol Oncol 60:120, 1996.
6. Omura GA, Blessing J, Vaccarello L, Berman M, Mutch D, **Clarke-Pearson DL**, Anderson B: A randomized trial of Cisplatin versus Cisplatin + Mitolactol versus Cisplatin + Ifosfamide in advanced squamous carcinoma of the cervix by the Gynecologic Oncology Group (GOG). Abstract. ASCO, 1995.
7. Alberts DS, Liu PY, Hannigan EV, O'Toole R, Williams SD, Vogel S, Franklin FW, **Clarke-Pearson DL**, Malviya VK, Dubeshter B, Hoskins W, Adelson M, Alvarez RD, O'Sullivan J, Garcia DJ, Sparks D, Rothenberg ML: Phase III study of intraperitoneal (IP) Cisplatin CDDP/Intravenous (IV) Cyclophosphamide (CPA) vs. IV CDDP/IV CPA in patients (Pts) with optimal disease stage III ovarian cancer: A SWOG-GOG Intergroup Study. Abstract. ASCO, 1995.
8. Stehman FB, Bundy BN, Ball H, **Clarke-Pearson DL**: Sites of failure and times to failure in carcinoma of the vulva treated conservatively: A Gynecologic Oncology Group Study. Abstract. AGOS 1995.
9. Omura GA, Blessing J, Vaccarello L, Berman M, Mutch D, **Clarke-Pearson D**, Anderson B: A randomized trial of cisplatin versus cisplatin + mitolactol (CM) versus cisplatin + ifosfamide (CIFX) in advanced squamous carcinoma of the cervix (SCC) by the Gynecologic Oncology Group (GOG). Presented at the 1995 American Society of Clinical Oncology Annual Meeting.
10. **Clarke-Pearson DL**, Berchuck A, Kohler M, Rodriguez GC: Retroperitoneal drains/morbidity of nodes. Society of Gynecologic Oncologists, 1993.
11. Hoskins WJ, McGuire WP, Brady MS, Copeland L, Homesley HD, **Clarke-Pearson DL**: Serum CA-125 for prediction of progression in advanced epithelial ovarian carcinoma (AOC). The Gynecologic Oncology Group (GOG). Proc ASOC (Abstract #707) 11:223, March 1992.
12. McGuire WP, Hoskins WJ, Brady MF, Homesley HD, **Clarke-Pearson DL**: A Phase III trial of dose intensive (DI) cisplatin (CDDP) and Cytosan (CTX) in advanced ovarian cancer (AOC). Proc ASCO, March 1992.
13. Hoskins WJ, McGuire WP, Brady MS, Homesley HD, **Clarke-Pearson DL**: Serum CA-125 for prediction in advanced epithelial ovarian cancer (AOC). The Gynecologic Oncology Group (GOG).

Third Meeting of the International Gynecologic Cancer Society, September 22-26, 1991, Cairns, Australia.

14. McGuire WP, Hoskins WJ, Brady MS, Homesley HD, **Clarke-Pearson DL**: A Phase II trial of dose intense (DI) versus standard dose (SD) Cisplatin (CDDP) and Cytosin (CTX) in advanced ovarian cancer (AOC). The Gynecologic Oncology Group (GOG). Third Meeting of the International Gynecologic Cancer Society, September 22-26, 1991, Cairns, Australia.
15. Shpall E, **Clarke-Pearson DL**, Soper JT, Berchuck A, Jones R, Bast R, Lider Y, Vanacek K, Tyler T, Peters W: High dose alkylating agent chemotherapy with autologous bone marrow support in patients with Stage III/IV epithelial ovarian cancer. Society of Gynecologic Oncologists, 1990.
16. Soisson AP, Soper JT, Berchuck A, Creasman WT, **Clarke-Pearson DL**: The role of radiation therapy following radical hysterectomy for carcinoma of the cervix. Society of Gynecologic Oncologists, 1989.
17. Berchuck A, Soisson AP, Soper JT, **Clarke-Pearson DL**, McCarty KS Jr, Bast RC Jr: Cellular expression of CA-125 and metastatic potential of endometrial adenocarcinoma. Society of Gynecologic Oncologists, 1989.
18. Soisson AP, Berchuck A, Soper JT, **Clarke-Pearson DL**, Flowers J, Kinney R, McCarty KSJR, Bast RC Jr: TAG-72 expression in benign and malignant endometrium. American College of Obstetricians and Gynecologists, Armed Forces District Meeting, 1988.
19. Christensen C, McCarty KS Jr, Flowers J, Soper JT, McCarty KS Sr, **Clarke-Pearson DL**: Progesterone receptor in ovarian carcinoma: Comparison of biochemical and immunohistochemical techniques. American College of Obstetricians and Gynecologists, Annual Clinical Meeting, 1988.
20. Jenkins SM, Sotsman HD, Spritzer CE, Herfkens RJ, Carroll BA, Kadir S, **Clarke-Pearson DL**, Coleman RE: Diagnosis of deep venous thrombosis: Comparison of venography with four noninvasive techniques. The Radiological Society of North America, 1988.
21. Mutch DG, Soper JT, Babcock CJ, Christensen CW, **Clarke-Pearson DL**, Hammond CB: Recurrent gestational neoplasia: Experience of the Southeastern Trophoblastic Disease Center. Abstract, Gynecol Oncol 29:133, 1988.
22. Christensen C, McCarty KS Jr, Flowers J, Soper JT, McCarty KS Sr, **Clarke-Pearson DL**: Analysis of estrogen receptor in ovarian carcinoma using biochemical and monoclonal antibody assays. Presented at American College of Obstetricians and Gynecologists District IV Meeting. Atlanta, Georgia, October 1987.
23. **Clarke-Pearson DL**, Creasman WT: Prevention of postoperative deep venous thrombosis by two intense low-dose heparin regimens: A controlled trial. Abstract, Society of Pelvic Surgeons, 1986.
24. **Clarke-Pearson DL**, DeLong ER, Synan IS, Coleman RE, Creasman WT: Variables associated with postoperative deep venous thrombosis. Abstract, Society of Gynecologic Investigation, p. 119, 1986.
25. Siegel RS, Kessler CM, **Clarke-Pearson DL**, Barth S, Fortune W, Reba R, Coleman RE: Application of Indium-111-labeled donor platelets to detection of deep venous thrombosis. Clin Res 32:323A, 1984.
26. Creasman WT, Henderson D, **Clarke-Pearson DL**: Use of estrogens after treatment for adenocarcinoma of the endometrium. Gynecol Oncol 17:2, p. 255, 1984.
27. Siegel RS, **Clarke-Pearson DL**, Barth S, Fortune W, Lewis RJ, Reba R, Coleman RE: Application of Indium-111-labeled donor platelets to detection of deep venous thrombosis and monitoring clot

resolution on streptokinase therapy. Blood, Suppl 62:310,1983.

28. Siegel RS, **Clarke-Pearson DL**, Coleman RE: Indium-111-labeled platelets in the detection of deep venous thrombosis and pulmonary embolism. Blood 50:223, 1982.
29. Postoperative thromboembolism prophylaxis in gynecologic oncology: A prospective, controlled trial of low-dose heparin and external pneumatic calf compression. Gynecol Oncol, 1982.

**Un-refereed Publications**

1. **Clarke-Pearson DL.** Prevention and Management of Venous Thromboembolism (15 minute Video) for the Globathon to End Women's Cancer. September 2014.
2. **Clarke-Pearson DL,** Brincat C, Tang J. Prevention and Management of Venous Thromboembolism in Gynecologic Surgery. ACOG Update. Vol 37, No 2. August, 2011.
3. **Clarke-Pearson DL.** Preventing Venous Thromboembolism: Evidence-based Perioperative tactics. OBG Management. 2006, 18: 56-66.
4. **Clarke-Pearson DL:** Prevention of venous thrombosis following gynecologic surgery in menopausal patients. Menopausal Medicine Vol 4 (4):6-9, 1996.
5. Rodriguez GC, **Clarke-Pearson DL:** What is the appropriate preoperative and prenatal screen for hemostatic disorders? Obstet Gynecol Forum, November 1991.
6. **Clarke-Pearson DL,** Hume RF: Venous thromboembolic disease in obstetrics and gynecology: Prevention, diagnosis and treatment. Curr Problems in Obstet Gynecol, 1989.
7. Hunter VJ, Christensen C, **Clarke-Pearson DL:** Evaluation and management of the abnormal Papanicolaou smear. North Carolina Family Physician, 1989.
8. **Clarke-Pearson DL,** Krumholz AB: When the pap smear is equivocal. Patient Care 23:43-47, 1989.
9. **Clarke-Pearson D,** DiSaia P, Mastroianni L, Richart R, Weingold AB: Advances in managing endometrial carcinoma. Patient Care 22:102-116, 1988.
10. Creasman WT, Smith EB, **Clarke-Pearson DL:** Current concepts of gestational trophoblastic disease. Female Patient, 1984.
11. Creasman WT, **Clarke-Pearson DL:** Abnormal cervical cytology: Spotting it, treating it. Contemporary Obstet Gynecol 21:53-76, 1983.
12. Hammond CB, **Clarke-Pearson DL,** Soper JT: Management of patients with gestational trophoblastic neoplasia: Experience of the Southeastern Regional Center. In: The Proceedings of the World Congress on Gestational Trophoblastic Neoplasia, Nigeria, 1982.
13. **Clarke-Pearson DL:** Application of impedance phlebography in obstetrics. Symposium on Noninvasive Diagnostic Techniques in Vascular Disease. San Diego, California, 1979.
14. **Clarke-Pearson DL:** The O.S.R. as an influence to health education. The Scalpel, Journal of Alpha Delta Alpha Medical Honor Society, 1975.

**Teaching Record**

- 2022 Society of Pelvic Surgeons Annual Meeting: Panel Moderator- "Where are the limits to cancer excision and reconstruction?"
- 2020 George Washington University Medical Oncology Board Review Course (Faculty) "Cervix, vulva vagina cancer and gestational trophoblastic disease" (by zoom)
- 2019 Presidential Speaker, South Atlantic Association of ObGyn Annual meeting, Sea Island Georgia

George Washington University Medical Oncology Board Review Course (Faculty) “Cervix, vulva vagina cancer and gestational trophobalastic disease”

- 2018 Visiting Professor, University of West Virginia, Morganton, WV  
Antonio Palladino Lectureship

George Washington University Medical Oncology Board Review Course (Faculty) “Cervix, vulva vagina cancer and gestational trophobalastic disease”

- 2016 Plenary Session, Society of Pelvic Surgeons, St Louis, Mo. “Venous Thromboembolism:

Minimally Invasive Compared with Open Hysterectomy for Endometrial Cancer”  
Key Note Speaker. ACOG Armed Forces District Meeting, Orlando, FL

Visiting Professor and Research Day Judge, Cleveland Clinic Department of Obstetrics and Gynecology and Women’s Research Institute, Cleveland, Ohio

Visiting Professor, Department of Obstetrics and Gynecology, Carilion Roanoke Memorial Hospital, Roanoke, Va.

George Washington University  
Medical Oncology Board Review Course (Faculty) “Cervix, vulva vagina cancer and gestational trophobalastic disease”

- 2015 Visiting Professor  
University of Michigan

George Washington University  
Medical Oncology Board Review Course (Faculty)

- 2014 Visiting Professor  
Massachusetts General Hospital, ObGyn Department Grand Rounds Boston, MA  
Invited speaker: ACOG District II Annual Meeting, New York City “Uterine Morcellation: A Decision Analysis”

George Washington University Medical Oncology Board Review Course (Faculty) “Cervix, vulva vagina cancer and gestational trophobalastic disease”

- 2013 Visiting Professor and Resident Research Day Judge  
Department of Obstetrics and Gynecology, University of Nebraska Omaha, NE  
Visiting Professor, Emory University Department of Obstetrics and Gynecology Atlanta, GA

Key Note Speaker: Inaugural Ireland Ovarian Cancer Forum “Surgery for Ovarian Cancer”  
Dublin, Ireland

Panel Moderator, American College of Surgeons Annual Clinical Congress “General Surgery in the Pregnant Patient” Washington, DC

George Washington University  
Medical Oncology Board Review Course (Faculty)

- 2012 Clifford Wheless Lectureship, Johns Hopkins University, Department of Obstetrics and Gynecology, Baltimore, MD

Panel Moderator, American College of Surgeons Annual Clinical Congress “Multidiciplinary approach

to Vaginal Fistula” Chicago, IL

Resident Research Day Judge and Visiting Professor  
Department of Obstetrics and Gynecology, Greenville Hospital System, Greenville, SC

Visiting Professor: University Teaching Hospital, Department of Obstetrics and Gynecology, Lusaka, Zambia

Cervical Cancer management  
Current Treatment of Vulvar Carcinoma

Visiting Professor: Center for Infectious Disease Research in Zambia (CIDRZ), Lusaka, Zambia

Human Papilloma Vaccine for the Prevention of Cervical Cancer

Visiting Professor: Inova Fairfax Hospital Women’s Center, Fairfax VA

Visiting Professor: Emory University School of Medicine, Department of Obstetrics and Gynecology.  
Atlanta, GA

George Washington University  
Medical Oncology Board Review Course (Faculty)

- 2011 Sloane Symposium: Current Issues and Controversies in Obstetrics and Gynecology Columbia University, College of Physicians and Surgeons, Department of Obstetrics and Gynecology  
Vandewiele Lecturer: “Prevention of Venous Thromboembolism in Gynecologic Surgery”  
Guest Lecturer and Judge: Resident Research Day, Columbia University “What to say in your Operative Note”

University of Kentucky: Residents’ Research Day Speaker  
Virginia Commonwealth University School of Medicine. Department of Obstetrics and Gynecology  
Annual Ware-Dunn Symposium Keynote speaker

George Washington University  
Medical Oncology Board Review Course (Faculty)

**2010** New England Obstetrical and Gynecological Society, Sturbridge, MA  
Invited Speaker

ACOG Annual Clinical Meeting, San Francisco, CA  
Luncheon Seminar Leader

George Washington University Medical Oncology Review Course  
Washington, DC  
Invited Faculty

MD Anderson Cancer Center Medical Oncology Review Course  
Houston, TX  
Invited Faculty

The Society of Gynecologic Oncology of Canada  
Royal College of Physicians and Surgeons of Canada  
Annual Meeting  
Invited Lecturer: Thromboprophylaxis in Minimally Invasive Surgery

Visiting Professor  
University of South Florida, Tampa, FL

**2009** Resident Research Day

ACOG District IV Meeting, Asheville, NC  
“Prevention of Venous Thromboembolism”  
“Stump the Professors: Panel”

American College of Surgeons’ Annual Meeting, Chicago, IL  
“Complicated Hysterectomy”

Visiting Professor: Hartford Hospital, Hartford CT

Visiting Professor: University of Connecticut, Farmington, CT

Visiting Professor: Memorial Sloan Kettering Cancer Center

Southern Obstetric and Gynecologic Seminar, Asheville, NC  
“Prevention of VTE following Gynecologic Surgery”  
“The Operative Note: What to say?”

Woman’s Hospital 7<sup>th</sup> Annual Founders Commemorative Lectureship, Woman’s Hospital,  
Baton Rouge, LA

**2008** Visiting Professor, Department of Obstetrics and Gynecology, Yale University

Course Director, ACOG CME Course “Complex Pelvic Surgery”, Phoenix, AZ

Invited Speaker: First Annual Gynecologic Cancer Symposium, Washington, DC April 18, 2008

Visiting Professor, University of Wisconsin Resident’s Research Day, Ben M. Peckman Memorial Lecturer, Madison, WI

ACOG representative to Symposium on Surveillance for Venous Thrombosis, American Society of Hematology, Washington DC

**2007** Visiting Professor, Department of Obstetrics and Gynecology, University of Miami

Faculty, University of Utah CME Course “Obstetrics and Gynecology: Update and Current Controversies” Park City Utah

Visiting Professor, Department of Obstetrics and Gynecology St. Louis University, St. Louis MO

Invited Lecturer: Marvin Camel Memorial Lecture, Washington University, Department of Obstetrics and Gynecology, St Louis, MO

Presidential Panel Speaker: Society of Pelvic Surgeons Annual Meeting, Cleveland, OH “What Can We do to prevent Venous Thromboembolism?”

**2006** Course Director: ACOG Annual Clinical Meeting: “Complex Gynecologic Surgery, Washington DC

Invited Speaker, ACOG District IV Annual Meeting, Palm Beach, FL

**2005** Course Director: ACOG Annual Clinical Meeting: “Complex Gynecologic Surgery, San Francisco

Course Director: ACOG Free-standing CME Course “Complex Gynecologic Surgery, Preventing Complications” Dana Point, CA

**2004** Society of Surgical Oncology: Symposium on Prevention of Venous Thromboembolism in the Surgical Oncology Patient

Postgraduate Course Faculty: ACOG Cancun, Mexico “Advanced Gynecologic Surgery”

American College of Obstetricians and Gynecologists, Annual Clinical Meeting, Philadelphia, PA  
Faculty, 120 Course: Special Topics for the Advanced Gynecologic Surgeon  
Faculty, Luncheon Seminar: “Prevention of Postoperative Venous Thromboembolism”  
Speaker: “Late-breaking News in Gynecologic Oncology”

Visiting Professor, University of Kansas School of Medicine, Truman Medical Center

Faculty: ACOG Indiana Section Meeting, Indianapolis  
“Surgery in the Obese Patient”, “Surgical Instruments”

**2003** Faculty, The 3<sup>rd</sup> Annual Cancer Conference, Aultman Cancer Center, Canton Ohio “Prevention and Management of Perioperative Venous Thromboembolism in the Gynecologic Cancer Patient”

Visiting Professor, Department of Obstetrics and Gynecology, University of Massachusetts, Worcester, MA

- 2002** Visiting Professor  
Bowman Gray School of Medicine
- Residents' Day Research Judge  
Winston Salem, NC
- American College of Surgeons' Annual Clinical Congress  
Panel Discussant: "Surgical Problems: Unexpected adnexal mass, tuboovarian abscess"  
Video Presentation: "Intraoperative Radiation Therapy for the treatment of Recurrent Cervical Carcinoma"  
Discussant: Video Presentation "Laparoscopic Infrarenal paraaortic lymphadenectomy"
- 2001** ACOG Annual Meeting  
Postgraduate Seminar  
Gynecologic Surgery in the Elderly
- George Washington University  
Medical Oncology Board Review Course (Faculty)
- 2000** Keynote Speaker  
Knoxville Obstetrical and Gynecological Society
- ACOG Annual Meeting (Course Director)  
Postgraduate Course  
Gynecologic Surgery for the Advanced Pelvic Surgeon
- Visiting Professor  
East Carolina University School of Medicine
- Visiting Professor  
Pennsylvania State University School of Medicine (Hershey)
- George Washington University  
Medical Oncology Board Review Course (Faculty)
- 1999** ACOG Annual Meeting (Course Director)  
Postgraduate Course  
Gynecologic Surgery for the Advanced Pelvic Surgeon
- George Washington University School of Medicine  
Medical Oncology Board Review Course (Faculty)
- Visiting Professor  
University of Virginia Health Sciences Center
- ACOG Annual Meeting (Course Director)  
Postgraduate Course  
Gynecologic Surgery for the Advanced Pelvic Surgeon
- 1998** ACOG Annual Meeting (Course Director)  
Postgraduate Course  
Gynecologic Surgery for the Advanced Pelvic Surgeon

George Washington University School of Medicine  
Medical Oncology Board Review Course (Faculty)

Visiting Professor  
Temple University School of Medicine

Keynote Speaker  
Maryland Obstetrical and Gynecological Society

Visiting Professor  
University of Louisville  
“Prevention of Postoperative Venous Thromboembolism”  
“Management of Patients with Thrombophilias”

**1997** Visiting Professor  
University of Utah, Salt Lake City

ACOG Annual Meeting (Course Director)  
Postgraduate Course  
Advanced Surgery for the Gynecologist

Visiting Professor  
Cleveland Clinic Foundation  
Department of Obstetrics and Gynecology  
Cleveland, Ohio

George Washington University School of Medicine  
Medical Oncology Board Review Course (Faculty)

Keynote Speaker  
Chicago Gynecological Society

Visiting Professor  
University of Louisville School of Medicine

Visiting Professor  
Washington University School of Medicine

Visiting Professor  
Johns Hopkins University School of Medicine

ACOG Annual Clinical Meeting  
Faculty, 120 Course: Special Topics for the Advanced Gynecologic Surgeon  
Faculty, Seminar: “Gynecologic Surgery in the Elderly”  
Faculty, Luncheon Seminar: “Prevention of Postoperative Venous Thromboembolism”

American College of Surgeons’ Annual Clinical Congress  
Panel Discussant: “Management of Gynecologic Problems Encountered by the General Surgeon at the time of Surgery. “Surgical Management of Ovarian Cancer Discovered at the time of Laparotomy”

**1996** Visiting Professor  
Dartmouth Medical School

Director ACOG Postgraduate Course  
Annual Clinical Meeting

Special Problems for the Advanced Gynecologic Surgeon

Visiting Professor  
University of Tennessee School of Medicine  
Chattanooga, Tennessee

Visiting Professor  
University of South Florida School of Medicine  
Tampa, Florida

Visiting Professor  
Washington University School of Medicine  
St. Louis, Missouri

John L. McKelvey Lecturer  
New Treatments for Ovarian Cancer  
University of Minnesota  
Minneapolis, Minnesota

Faculty - Taubman Ovarian Cancer Symposium  
St. Joseph's Hospital  
Tulsa, Oklahoma

ACOG Postgraduate Course (Course Director)  
San Juan, Puerto Rico  
Advanced Pelvic Surgery

**1994** ACOG Clinical Meeting CME Course  
Orlando, FL  
"Gynecologic Cancer"

Guest Speaker  
Seattle Gynecological Society Assembly

**1993** Visiting Professor - Department of OB/GYN  
University of Massachusetts  
Worcester, Massachusetts

ACOG Clinical Meeting - CME Course  
Washington, DC  
"Gynecologic Surgery"

PostGraduate Course in Obstetrics and Gynecology  
Kaiser-Permanente - Maui, Hawaii  
"Screening for Ovarian Cancer"  
"Management of CIN with LEEP"  
"Difficult Vaginal Hysterectomy"  
"Incisions and Wound Closures"

Duke/US Surgical Course  
"Laparoscopic Assisted Difficult Hysterectomy"

Visiting Professor - Mt. Sinai Hospital  
Baltimore, MD  
"Prevention of Thromboembolism"  
"Management of Ovarian Cancer"

**1992** Visiting Professor - Department of OB/GYN  
University of Massachusetts  
Worcester, Massachusetts

**1991** Visiting Professor  
George Washington University School of Medicine

Course Director - ACOG Course (120 series)  
Annual Clinical Meeting  
New Orleans, Louisiana  
"Gynecologic Oncology for the Practicing Gynecologist"

Course Director - ACOG Course  
Vancouver, British Columbia, Canada  
"Gynecologic Surgery"

Visiting Professor  
Florida Hospital Cancer Center  
Orlando, Florida

Paper Presentation  
Poster Presentation  
Society of Gynecologic Oncologists  
Orlando, Florida

Visiting Professor  
Ohio State University School of Medicine  
Columbus, Ohio

Medical Oncology Board Review Course  
George Washington University  
Washington, DC  
"Cervical, Vulvar and Vaginal Cancer"  
"Gestational Trophoblastic Disease"

**1990** Society of Gynecologic Oncologists  
Breakfast Seminar  
"Diagnosis and Prevention of Postoperative Venous Thrombosis"

Course Director - ACOG Course (120 Series)  
Annual Clinical Meeting  
San Francisco, California  
"Update in Clinical Gynecologic Oncology"

Seminar, ACOG Clinical Meeting  
"Prevention of Postoperative Venous Thrombosis"

**1989** Tumor Conference, Moore Regional Hospital  
Pinehurst, North Carolina

Course Director - ACOG Course (120 Series) Annual Clinical Meeting, Atlanta, Georgia  
"Update in Clinical Gynecologic Oncology"

Seminar, ACOG Clinical Meeting  
"Management of Early Ovarian Cancer"

Luncheon Conference, ACOG Annual Meeting  
"Reproductive Outcome Following Cancer Treatment"

Medical Oncology Board Review Course, George Washington University, Washington, DC  
"Cervical Cancer"

**1988** Matt Weiss Symposium  
St. Louis, Missouri

ACOG Annual Clinical Meeting  
Poster Session Presentation  
Review of Clinical Research Paper  
Review of Surgical Film  
Clinical Seminar Presentation

ACOG Course  
Juneau, Alaska  
"Gynecologic Surgery"

**1987** Update in Obstetrics and Gynecology  
Williamsburg, Virginia

North Carolina Obstetrical and Gynecological  
Society Meeting, Southern Pines, North Carolina

Visiting Professor, University of Minnesota School of Medicine, Minneapolis, Minnesota

ACOG Annual Clinical Meeting  
Clinical Paper Presentation  
Clinical Seminar Presentation

Southern Obstetrics and Gynecology Seminar  
Asheville, North Carolina

Satellite Teleconference  
Chicago, Illinois  
"Selected aspects of the care of the menopausal woman"

Chicago Medical Schools' Review Course  
Chicago, Illinois  
"Endometrial Carcinoma"

### **Grants**

<b>Active Grants:</b>					
None at this time					
<b>Completed Grants:</b>					

Project Period	Agency	Title	Amount	Role	% of Effort
9/27/05-3/10/10	NIH/NICHD	Women's Reproductive Health Research (WRHR) Career Development Center at UNC - HDD050113-02	\$370,367 Annual Direct Costs	Principal Investigator	
3/1/00-3/31/02	Pharmacia Upjohn Pharmaceuticals	Randomized Comparison of Low Molecular Weight Heparin vs. Oral Anticoagulant Therapy for Long Term Anticoagulation in cancer patients – 98-Frag-069	\$ 73,000	Principal Investigator	
1/1/99-6/15/00	Zeneca Pharmaceuticals, Inc	Phase II/III Trial of IV ZD9331 in patients with recurrent refractory ovarian cancer	\$ 18,320	Principal Investigator	
6/1/98-6/1/00	Pharmacia Upjohn Pharmaceuticals	Prospective Randomized Trial Comparing Pneumatic Compression stockings To Low Molecular Weight Heparin (dalteparin) in the prevention of postoperative venous Thrombosis	\$ 100,760	Principal Investigator	
06/01/95 - 05/31/2000	National Cancer Institute	Hyperthermia and Perfusion Effects in Cancer Therapy	\$10,930,969	Investigator	2%
03/15/98-03/14/00	Novartis Pharmaceuticals	PSC 833 with taxol and carboplatin vs. carboplatin alone in patients with stage III ovarian cancer	\$ 102,240	Principal Investigator	
8/1/97-7/31/99	NIH	Hyperthermia and Perfusion Effects in Cancer Therapy	\$ 1,832,501	Co-Investigator	
5/28/97-12/31/98	Smithkline Beecham Pharmaceuticals	Oral Topotecan Single Agent for 5 days in patients with ovarian cancer	\$ 81,600	Principal Investigator	
01/01/93-12/31/98	National Cancer Institute	Comprehensive Cancer Center Core Support Grant	\$ 4,442,597	Program Director	10%
06/01/94 -	National Cancer	Autologous Bone	\$641,613	Investigator	10%

03/31/97	Institute	Marrow Transplantation in Breast and Ovarian Cancer: Project IB			
03/15/96-05/30/96	Ethicon, Inc	An Open, Controlled, Rand, Multicenter, Evaluation of Dyed Monocryl (Poliglecaprone 25) Synthetic Absorbable Suture as Compared to Surgical Gut (Chromic) Absorbable Suture	\$ 4,000	Principal Investigator	
1987-1996	American Cancer Society	Clinical Oncology Fellowship	\$ 20,000 (Direct)	Principal Investigator	5%
10/01/92-09/30/94	Centocor, Inc.	CA125 Post-Market Evaluation	\$ 8,750	Principal Investigator	5%
12/15/93-09/21/94	Smith-Kline Beecham Pharmaceutical	Phase III Topotecan versus Taxol in Women with Advanced Ovarian Carcinoma	\$ 37,500	Principal Investigator	5%
12/15/93-08/14/94	Smith-Kline Beecham Pharmaceutical	II Topotecan, Given as Five Daily Doses Every 21 Days in Ovarian Cancer	\$ 37,500	Principal Investigator	10%
07/01/89 - 03/31/94	Gynecologic Oncology Group	Gynecologic Oncology Group, Duke University Medical Center	\$ Contingent on number of patients	Co-Principal Investigator	30%
01/01/91 – 09/01/93	Organon, Inc.	ORG 2766 as a Neuroprotector from Cisplatin Chemotherapy for Ovarian Cancer	\$97, 575	Principal Investigator	10%
02/01/91 - 01/31/92	Organon, Inc.	Decapeptyl Treatment of Advanced Ovarian Cancer (Phase II Trial)	\$100,098	Principal Investigator	10%
11/01/90-10/31/91	Cytogen, Inc.	111In-CYT-103 Oncoprobe Evaluation of Ovarian Cancer	\$ 124,000	Principal Investigator	10%
07/01/86-06/30/91	National Institutes of Health	Avoidable Mortality from Cancers in Black Populations	\$ 4,647,291	Co-Investigator	10%
06/01/87 - 05/31/89	Public Health Service	Improved Instrumentation for the Diagnosis of Venous Thrombosis	\$162,804 (Direct)	Co-Principal Investigator	10%
05/01/88 -	National Cancer	Gynecologic	\$97,073	Co-Principal	10%

04/30/89	Institute	Oncology Group, Duke University Medical Center	(Direct)	Investigator	
01/01/88 - 12/30/88	Centocor, Inc.	Evaluation of the Safety and Preliminary Diagnostic Accuracy of IV Administered Indium-111-labeled OC-125 Monoclonal Antibody in Patients with Carcinoma of the Ovary	\$ 20,000 (Direct)	Co-Principal Investigator	5%
01/01/88 - 12/30/88	Centocor, Inc.	Evaluation of the Safety and Preliminary Diagnostic Accuracy of IV Administered Indium-111-labeled OV-TL3 Monoclonal Antibody in Patients with Carcinoma of the Ovary	\$ 40,000 (Direct)	Co-Principal Investigator	5%
05/01/85- 04/30/87	National Cancer Institute	Illinois Cancer Council - Gynecologic Oncology Group	\$ 21,000 (Direct)	Co-Principal Investigator	10%
07/01/81- 06/30/84	American Cancer Society	Junior Faculty Clinical Fellowship	\$ 35,000	Principal Investigator	30%
01/01/83- 12/31/83	Trent Foundation	In-vitro chemotherapy sensitivity testing of ovarian carcinoma	\$ 1,000	Principal Investigator	5%

### **PROFESSIONAL SERVICE**

#### **To discipline:**

##### **A. National/International**

**2023** President Elect, Society of Pelvic Surgeons

2021- 2022 Chair, NRG Oncology Data Monitoring Committee (Gynecologic Oncology Group)

2019-2023 Vice President, Society of Pelvic Surgeons  
Editorial board member: Journal of Gynecologic Surgery

2018-2020 Chair, Council of University Chairs of Obstetrics and Gynecology

- 2014** Chair, External Site Visit Committee, Department of Obstetrics and Gynecology, Penn State  
2014 University College of Medicine, Department of Obstetrics and Gynecology Member,  
2014 CUCOG Executive Board
- 2011** Member, American College of Surgeons Advisory Committee (ObGyn)  
2011 Member, CUCOG Executive Committee  
2011 Chair, ACOG Committee on Gynecologic Practice  
2011 Chair, SGO Nominating Committee
- 2010-2013** Immediate Past President, SGO  
2010-2013 Member, ACOG Executive Board (Representing the Society of Gynecologic Oncology)  
2011-2013 Chair, Committee on Gynecologic Practice, ACOG  
2007 -2010 Member, Education/Research Committee, Society of Pelvic Surgeons  
1988- 2005 Board Examiner: Obstetrics and Gynecology , ABOG  
2010-2011 Vice-Chair, Committee on Gynecologic Practice, ACOG  
2010 President, Society of Gynecologic Oncologists  
2009-2010 Editorial Board, Precis, Gynecology, ACOG  
Program Chair, Society of Pelvic Surgeons
- 2008**  
2008-2010 Committee on Gynecologic Practice, ACOG  
2008 President Elect II, Society of Gynecologic Oncologists  
2008 Chair, Membership Committee. Society of Pelvic Surgeons  
2007-2008 Vice President, Society of Gynecologic Oncologists
- 2007**  
2007 Editorial Board: Precis, Oncology, ACOG  
2007 SGO Executive Council, Society of Gynecologic Oncologists  
2007 Chair, Task Force to select Editor and Chief, Gynecologic Oncology, Society of Gynecologic Oncologists  
2007 Co-Chair, Strategic Planning Committee, Society of Gynecologic Oncologists  
2007 Member, By-laws Committee, Society of Gynecologic Oncologists
- 2005**  
2005 NC Breast and Cervical Cancer Control Program's (BCCCP) Medical Advisory Committee, North Carolina Department of Environment, Health, and Natural Resources  
2005-2019 Member, Clinical Cancer Committee, Moses Cone Health System  
2005-2019 Director, Gynecologic Oncology Program, Moses Cone Health System  
2005-2019 Member, Cancer Center Executive Committee, Moses Cone Health System  
1998-2005 Member, Executive Committee Cancer Center Clinical Service Unit, Duke University  
1998-2005 Co-Medical Director, Surgical Oncology Clinic, Duke University  
1992-2005 Member, Operating Room Committee, Duke University  
1991-2005 Principal Investigator, Duke University, Gynecologic Oncology Group  
1987-2005 Director of Gynecologic Oncology Fellowship Program (Duke Univ), ABOG  
1987-2005 Director, Gynecologic Oncology Program, Duke Comprehensive Cancer Center, Duke University  
1987-2005 Member, Steering Committee Strategic Planning Task Force, Duke Comprehensive Cancer Center, Duke University  
1987-2005 Member, Executive Committee, Duke Comprehensive Cancer Center, Duke University
- 2003**  
2003 Nominating Committee, Society of Gynecologic Oncologists  
2003 President and Program Chairman, Mid Atlantic Gynecologic Oncology Society

**2002**

- 2002 President-Elect, Mid Atlantic Gynecologic Oncology Society
- 2002 Member, Membership Committee, Society of Pelvic Surgeons
- 2002 Member, Oncology Strategic Planning Council, Duke University

**2001**

- 2001 Editorial Board: Precis, Oncology, ACOG
- 2001 Board Examiner: Gynecologic Oncology, ABOG

**2000**

- 2000 Member, Nominating Committee (AGOS Foundation)
- 2000 Program Chairman (Annual Meeting), Mid Atlantic Gynecologic Oncology Society
- 1994-2000 Member, Education Committee, Society of Gynecologic Oncologists

**1999**

- 1996-1999 Member, Fellowship Committee, AGOS

**1998**

- 1994-1998 Council Member, Society of Gynecologic Oncologists
- 1990-1998 Ovarian Cancer Committee, Gynecologic Oncology Group

**1997**

- 1993-1997 Editorial Board Member, Duke Cancer Report, Duke University
- 1993-1997 Committee on Gynecologic Practice, ACOG
- 1993-1997 Chairman, Committee on Gynecologic Oncology Practice, ACOG
- 1993-1997 ACOG Liaison Representative to the Society of Gynecologic Oncologists
- 1994-1997 Member, Committee on Clinical Practice, Society of Gynecologic Oncologists

**1995**

- 1994-1995 Chairman, 1995 Program Committee, Society of Gynecologic Oncologists

**1994**

- 1993-1994 Ad hoc Council Member, Society of Gynecologic Oncologists
- 1993-1994 Ad hoc Committee on Clinical Practice Policy Development Society of Gynecologic Oncologists
- 1994 Society of Pelvic Surgeons

**1993**

- 1991-1993 Chairman, Gynecology Committee, North Carolina OB/GYN Society
- 1991-1993 Member, Professional Activities Committee, North Carolina OB/GYN Society
- 1993 Medical Director, Duke North Hospital, 5900 Unit, Duke University
- 1993 Fellow, American Gynecological and Obstetrical Society
- 1993 Member, Ad hoc Committee to Define Criteria for Tenure in Clinical Medicine , Duke University
- 1993 Department of Surgery Chairman Search Committee, Duke University

**1992**

- 1990-1992 Member, Task Force on Cervical Cancer, Chairman, Subcommittee on Impact of Appropriate Follow-up Care, North Carolina Department of Environment, Health, and Natural Resources

**1991**

- 1987-1991 Co-Principal Investigator, Duke University Grant, Gynecologic Oncology Group
- 1987-1991 Committee on Technical Bulletins, ACOG
- 1991 Board Examiner: Gynecologic Oncology, ABOG
- 1991 Member, Director of Surgical Pathology Search Committee, Duke University

**1990**

- 1990 Member, Department of Pathology Chairman Search Committee, Duke University
- 1982-1990 Gynecologic Management Committee, Gynecologic Oncology Group

**1989**

- 1989 Fellow, American College of Surgeons

**1988**

- 1988 Mid-Atlantic Gynecologic Oncology Society
- 1988 Southern Obstetrical and Gynecological Seminar
- 1988 International Gynecologic Cancer Society
- 1988 Mid-Atlantic Gynecologic Oncology Society
- 1988 Southern Obstetrical and Gynecological Seminar

**1987**

- 1985-1987 Chicago Medical Society
- 1985-1987 Illinois Cancer Council
- 1985-1987 Illinois State Medical Society
- 1985-1987 Chicago Association of Gynecologic Oncologists
- 1987 North Carolina Medical Society
- 1987 North Carolina Obstetrical and Gynecological Society
- 1987 American Society of Clinical Oncologists

**1986**

- 1986 Chicago Gynecological Society

**1985**

- 1982-1985 Co-Principal Investigator, Duke University Grant, Gynecologic Oncology Group
- 1985 Central Association of Obstetricians and Gynecologists
- 1985 Central Association of Obstetricians and Gynecologists
- 1985 American Medical Association

**1982**

- 1982 Gynecologic Oncology Group
- 1982 Society of Gynecologic Oncologists
- 1982 Fellow, American College of Obstetricians and Gynecologists

**1979**

- 1979 Piedmont Obstetrical and Gynecological Society
- 1979 Bayard Carter Society of Obstetricians and Gynecologists
- 1979 Junior Fellow Section Chairman, ACOG

**1978**

- 1978 Junior Fellow Section Co-Chairman, ACOG

**1977**

- 1977 Junior Fellow Section Program Chairman, ACOG

**B. Within UNC-Chapel Hill**

- 2018-2021 Member, School of Medicine Promotions and Tenure Committee
- 2013-2019 Member, UNC Hospitals Committee of Perioperative Leaders
- 2011-2019 Member, Physicians and Associates Executive Committee
  - Member, P&A Finance and Compensation Committee
  - Member, P&A Committee on Payer Relations

2009- Member, Strategic Planning Committee: Hillsboro Hospital  
 2009-2019 Member, Strategic Planning Committee UNC HCS  
 2008-2019 Member, Dean's Advisory Committee on Part-Time Tenure Track Positions 2008-present Member Geographic Strategic Planning Committee  
 2008- 2019 Member UNC Strategic Planning Committee: Outpatient Surgery 2008-present Member UNC Strategic Planning Committee: Oncology  
 2007-2019 Member, Sheps Center Advisory Board  
 2007-2019 Member, Center for Women's Health Research Advisory Board  
 2007-2009 Team Leader (Attending Physicians' Experience) UNC Hospital Commitment to Caring 2006-present Medical Director, NC Women's Hospital Ambulatory Services  
 2005-2019 Dean's Advisory Committee  
 2005-2019 UNC Hospital Executive Committee  
 2005-2019 Physician and Chief, North Carolina Women's Hospital  
 2005-2019 Member, Physician and Associates Board/Faculty Physicians  
 2005-present Member, UNC Lineberger Cancer Center  
 2006, 2007 Chair, Data Safety Monitoring Board: An International Multi-Center Phase III Study of Chemoradiotherapy versus chemoradiotherapy plus hyperthermia for locally advanced cervical

### **Editorial Board Member**

1994-2004 Postgraduate Obstetrics and Gynecology  
 2003 Précis, Oncology, Second Edition  
 1995-2001 Associate Editor, Journal of Gynecologic Techniques  
 1994-2000 Gynecologic Oncology  
 2012-2015 Obstetrics and Gynecology  
 2020-present Journal of Gynecologic Surgery

### **Journal Reviewer**

Obstetrics and Gynecology

New England Journal of Medicine

American Journal of Obstetrics and Gynecology Journal of the American Medical Association (JAMA)

Annals of Internal Medicine

Pharmacotherapy

Fertility and Sterility

Gynecologic Oncology Cancer

International Journal of Gynecology and Obstetrics Journal of Pelvic Surgery

Journal of Gynecologic Surgery

# Exhibit B

Daniel Clarke-Pearson, M.D.  
Materials Considered

1. “A Survey of the Long-Term Effects of Talc and Kaolin Pleurodesis.” *British Journal of Diseases of the Chest* 73 (1979): 285–88.
2. Acencio, Milena M. P., Evaldo Marchi, Lisete R. Teixeira, Bruna Rocha Silva, Juliana Sanchez Silva, Carlos Sergio Rocha Silva, Vanessa Adelia Alvarenga, Leila Antonangelo, Francisco Suso Vargas, and Vera Luiza Capelozzi. “Talc Particles and Pleural Mesothelium Interface Modulate Apoptosis and Inflammation.” *Pathology* 46, no. S2 (2014): S76.
3. Acheson, E D, M J Gardner, E C Pippard, and L P Grime. “Mortality of Two Groups of Women Who Manufactured Gas Masks from Chrysotile and Crocidolite Asbestos: A 40-Year Follow-Up.” *British Journal of Industrial Medicine* 39, no. 4 (November 1982): 344–48.
4. ACOG. “Talc Use and Ovarian Cancer.” Statements, September 11, 2017.
5. Akhtar, Mohd Javed, Maqsood Ahamed, M.A. Majeed Khan, Salman A. Alrokayan, Iqbal Ahmad, and Sudhir Kumar. “Cytotoxicity and Apoptosis Induction by Nanoscale Talc Particles from Two Different Geographical Regions in Human Lung Epithelial Cells.” *Environmental Toxicology* 29 (2014): 394–406. <https://doi.org/10.1002/tox.21766>.
6. Akhtar, Mohd Javed, Sudhir Kumar, Ramesh Chandra Murthy, Mohd Ashquin, Mohd Imran Khan, Govil Patil, and Iqbal Ahmad. “The Primary Role of Iron-Mediated Lipid Peroxidation in the Differential Cytotoxicity Caused by Two Varieties of Talc Nanoparticles on A549 Cells and Lipid Peroxidation Inhibitory Effect Exerted by Ascorbic Acid.” *Toxicology in Vitro: An International Journal Published in Association with BIBRA* 24, no. 4 (June 2010): 1139–47.
7. American Cancer Society. “Talcum Powder and Cancer.” American Cancer Society, November 13, 2017.
8. Antoniou, A., et al. “Average Risks of Breast and Ovarian Cancer Associated with BRCA1 or BRCA2 Mutations Detected in Case Series Unselected for Family History: A Combined Analysis of 22 Studies.” *American Journal of Human Genetics* 72, no. 5 (May 2003): 1117–30.
9. Amrhein, V., et al., “Retire statistical significance.” *Nature*. 567 (2019): 305-307.
10. Arellano-Orden, Elena, Auxiliadora Romero-Falcon, Jose Martin Juan, Manuel Ocana Jurado, Francisco Rodriguez-Panadero, and Ana Montes-Worboys. “Small Particle-Size Talc Is Associated with Poor Outcome and Increased Inflammation in Thoracoscopic Pleurodesis.” *Respiration* 86 (2013): 201–9. <https://doi.org/10.1159/000342042>.
11. “ATSDR - Toxicological Profile: Asbestos.” Accessed August 16, 2018.
12. “ATSDR - Toxicological Profile: Silica.” Accessed August 16, 2018.
13. Baldwin, Lauren A., Bin Huang, Rachel W. Miller, Thomas Tucker, Scott T. Goodrich, Iwona Podzielinski, Christopher P. DeSimone, Fred R. Ueland, John R. van Nagell, and Leigh G. Seamon. “Ten-Year Relative Survival for Epithelial Ovarian Cancer:” *Obstetrics & Gynecology* 120, no. 3 (September 2012): 612–18.
14. Balkwill, Fran, and Alberto Mantovani. “Inflammation and Cancer: Back to Virchow?” *The Lancet* 357, no. 9255 (February 2001): 539–45. [https://doi.org/10.1016/S0140-6736\(00\)04046-0](https://doi.org/10.1016/S0140-6736(00)04046-0).
15. Barnhart, K., et al. “Baseline Dimensions of the Human Vagina.” *Human Reproduction* Vol. 21, no. 6 (2006): 1618-22.
16. Bartrip, P. W. J. “History of Asbestos Related Disease.” *Postgraduate Medical Journal* 80, no. 940 (February 1, 2004): 72–76. <https://doi.org/10.1136/pmj.2003.012526>.
17. Beck, B. D., H. A. Feldman, J. D. Brain, T. J. Smith, M. Hallock, and B. Gerson. “The

Daniel Clarke-Pearson, M.D.

Materials Considered

- Pulmonary Toxicity of Talc and Granite Dust as Estimated from an in Vivo Hamster Bioassay.” *Toxicology and Applied Pharmacology* 87, no. 2 (February 1987): 222–34.
18. Begg, Melissa D., and Dana March. “Cause and Association: Missing the Forest for the Trees.” *American Journal of Public Health* 108, no. 5 (May 2018): 620.
  19. Belotte, Jimmy, Nicole M. Fletcher, Awoniyi O. Awonuga, Mitchell Alexis, Husam M. Abu-Soud, Ghassan M. Saed, Michael P. Diamond, and Mohammed G. Saed. “The Role of Oxidative Stress in the Development of Cisplatin Resistance in Epithelial Ovarian Cancer.” *Reproductive Sciences* 21, no. 4 (2014): 503–8. <https://doi.org/10.1177/1933719113503403>.
  20. Belotte, Jimmy, Nicole M. Fletcher, Mohammed G. Saed, Mohammed S. Abusamaan, Gregory Dyson, Michael P. Diamond, and Ghassan M. Saed. “A Single Nucleotide Polymorphism in Catalase Is Strongly Associated with Ovarian Cancer Survival.” *PloS One* 10, no. 8 (2015).
  21. Berge, Wera, Kenneth Mundt, Hung Luu, and Paolo Boffetta. “Genital Use of Talc and Risk of Ovarian Cancer: A Meta-Analysis.” *European Journal of Cancer Prevention*, January 2017, 1.
  22. Berry, G., M. L. Newhouse, and J. C. Wagner. “Mortality from All Cancers of Asbestos Factory Workers in East London 1933-80.” *Occupational and Environmental Medicine* 57, no. 11 (November 2000): 782–85.
  23. Bertolotti, Marinella, Daniela Ferrante, Dario Mirabelli, Mario Botta, Marinella Nonnato, Annalisa Todesco, Benedetto Terracini, and Corrado Magnani. “[Mortality in the cohort of the asbestos cement workers in the Eternit plant in Casale Monferrato (Italy)].” *Epidemiologia E Prevenzione* 32, no. 4–5 (October 2008): 218–28.
  24. Blank, M M, N Wentzensen, M A Murphy, A Hollenbeck, and Y Park. “Dietary Fat Intake and Risk of Ovarian Cancer in the NIH-AARP Diet and Health Study.” *British Journal of Cancer* 106, no. 3 (January 31, 2012): 596–602.
  25. Blount, A M. “Amphibole Content of Cosmetic and Pharmaceutical Talcs.” *Environmental Health Perspectives* 94 (August 1991): 225–30.
  26. Bluemel, G., F. Piza, and Zischka-Konorsa W. “[Experimental animal research on the tissue reaction to starch and talc powder after their intraperitoneal use.].” *Wiener klinische Wochenschrift* 74 (January 1962): 12–13.
  27. Blumenkrantz, M. J., N. Gallagher, R. A. Bashore, and H. Tenckhoff. “Retrograde Menstruation in Women Undergoing Chronic Peritoneal Dialysis.” *Obstetrics and Gynecology* 57, no. 5 (May 1981): 667–70.
  28. Boorman, G. A., and J. C. Seely. “The Lack of an Ovarian Effect of Lifetime Talc Exposure in F344/N Rats and B6C3F1 Mice.” *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 242–43. <https://doi.org/10.1006/rtph.1995.1035>.
  29. Booth, M., V. Beral, and P. Smith. “Risk Factors for Ovarian Cancer: A Case-Control Study.” *British Journal of Cancer* 60, no. 4 (October 1989): 592–98.
  30. Bottazzi, Barbara, Elio Riboli, and Alberto Mantovani. “Aging, Inflammation and Cancer.” *Seminars in Immunology*, November 5, 2018. <https://doi.org/10.1016/j.smim.2018.10.011>.
  31. Bulbulyan, M. A., S. A. Ilychova, S. H. Zahm, S. V. Astashevsky, and D. G. Zaridze. “Cancer Mortality among Women in the Russian Printing Industry.” *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 166–71.
  32. Bunderson-Schelvan, Melisa, Jean C. Pfau, Robert Crouch, and Andrij Holian. “Nonpulmonary Outcomes of Asbestos Exposure.” *Journal of Toxicology and Environmental Health. Part B, Critical Reviews* 14, no. 1–4 (2011): 122–52. <https://doi.org/10.1080/10937404.2011.556048>.

Daniel Clarke-Pearson, M.D.

Materials Considered

33. Buz'Zard, Amber R., and Benjamin H. S. Lau. "Pycnogenol Reduces Talc-Induced Neoplastic Transformation in Human Ovarian Cell Cultures." *Phytotherapy Research: PTR* 21, no. 6 (June 2007): 579–86. <https://doi.org/10.1002/ptr.2117>.
34. Caldwell, Carlyle G., White Thomas Aubrey, William L. George, and James J. Eberl. Medical dusting powder. United States US2626257A, filed May 21, 1952, and issued January 20, 1953.
35. Camargo, M. Constanza, Leslie T. Stayner, Kurt Straif, Margarita Reina, Umaima Al-Alem, Paul A. Demers, and Philip J. Landrigan. "Occupational Exposure to Asbestos and Ovarian Cancer: A Meta-Analysis." *Environmental Health Perspectives* 119, no. 9 (September 2011): 1211–17.
36. Capital Breast Care Center, Georgetown University. "Ovarian Cancer." Capital Breast Care Center, April 14, 2016. <https://capitalbreastcare.georgetown.edu/health/ovarian>.
37. Capital Breast Care Center, Georgetown University. "Ovarian Cancer." Capital Breast Care Center, July 3, 2018. <https://capitalbreastcare.georgetown.edu/health/ovarian>.
38. Carr, C.J. "Talc: Consumer Uses and Health Perspectives" 21 (1995): 211–15.
39. Chang, S., and H. A. Risch. "Perineal Talc Exposure and Risk of Ovarian Carcinoma." *Cancer* 79, no. 12 (June 15, 1997): 2396–2401.
40. Chang, Che-Jui, Yu-Kang Tu, Pau-Chung Chen, and Hsiao-Yu Yang. "Occupational Exposure to Talc Increases the Risk of Lung Cancer: A Meta-Analysis of Occupational Cohort Studies." *Canadian Respiratory Journal*, 2017.
41. Chen, F., K. Gaitskell, M. J. Garcia, A. Albukhari, J. Tsaltas, and A. A. Ahmed. "Serous Tubal Intraepithelial Carcinomas Associated with High-Grade Serous Ovarian Carcinomas: A Systematic Review." *BJOG: An International Journal of Obstetrics and Gynaecology* 124, no. 6 (May 2017): 872–78.
42. Chen, L-M, et al. "Epithelial Carcinoma of the Ovary, Fallopian Tube, and Peritoneum: Epidemiology and Risk Factors - UpToDate," 2018.
43. Chen, L-M, et al. "Overview of Epithelial Carcinoma of the Ovary, Fallopian Tube, and Peritoneum - UpToDate," 2018.
44. Chen, Y., P. C. Wu, J. H. Lang, W. J. Ge, P. Hartge, and L. A. Brinton. "Risk Factors for Epithelial Ovarian Cancer in Beijing, China." *International Journal of Epidemiology* 21, no. 1 (February 1992): 23–29.
45. Chien, Jeremy, Hugues Sicotte, Jian-Bing Fan, Sean Humphray, Julie M. Cunningham, Kimberly R. Kalli, Ann L. Oberge, et al. "TP53 Mutations, Tetraploidy and Homologous Recombination Repair Defects in Early Stage High-Grade Serous Ovarian Cancer." *Nucleic Acids Research* 43, no. 14 (August 18, 2015): 6945–58.
46. Cibula, D., M. Widschwendter, O. Májek, and L. Dusek. "Tubal Ligation and the Risk of Ovarian Cancer: Review and Meta-Analysis." *Human Reproduction Update* 17, no. 1 (January 1, 2011): 55–67.
47. Cibula, David, Martin Widschwendter, Michael Zikan, and Ladislav Dusek. "Underlying Mechanisms of Ovarian Cancer Risk Reduction after Tubal Ligation." *Acta Obstetrica Et Gynecologica Scandinavica* 90, no. 6 (June 2011): 559–63.
48. CIMBA, Georgia Chenevix-Trench, Roger L Milne, Antonis C Antoniou, Fergus J Couch, Douglas F Easton, and David E Goldgar. "An International Initiative to Identify Genetic Modifiers of Cancer Risk in BRCA1 and BRCA2 Mutation Carriers: The Consortium of Investigators of Modifiers of BRCA1 and BRCA2 (CIMBA)." *Breast Cancer Research* 9, no. 2 (December 2007). <https://doi.org/10.1186/bcr1670>.
49. Cohen, Samuel M., and Lora L. Arnold. "Chemical Carcinogenesis." *Toxicological Sciences* 120, no. suppl\_1 (March 1, 2011): S76–92. <https://doi.org/10.1093/toxsci/kfq365>.

Daniel Clarke-Pearson, M.D.

Materials Considered

50. Colditz, Graham A. "Cancer Prevention." *UpToDate*, 2018.
51. Collaborative Group on Epidemiological Studies of Ovarian Cancer, V. Beral, R. Doll, C. Hermon, R. Peto, and G. Reeves. "Ovarian Cancer and Oral Contraceptives: Collaborative Reanalysis of Data from 45 Epidemiological Studies Including 23,257 Women with Ovarian Cancer and 87,303 Controls." *Lancet* 371, no. 9609 (January 26, 2008): 303–14.
52. Collaborative Group On Epidemiological Studies Of Ovarian Cancer, V. Beral, K. Gaitskell, C. Hermon, K. Moser, G. Reeves, and R. Peto. "Menopausal Hormone Use and Ovarian Cancer Risk: Individual Participant Meta-Analysis of 52 Epidemiological Studies." *Lancet (London, England)* 385, no. 9980 (May 9, 2015): 1835–42.
53. Committee on Practice Bulletins–Gynecology, Committee on Genetics, Society of Gynecologic Oncology. "Practice Bulletin No 182: Hereditary Breast and Ovarian Cancer Syndrome." *Obstetrics and Gynecology* 130, no. 3 (2017): e110–26.
54. Committee on the State of the Science in Ovarian Cancer Research, Board on Health Care Services, Institute of Medicine, and National Academies of Sciences, Engineering, and Medicine. *Ovarian Cancers: Evolving Paradigms in Research and Care*. Washington (DC): National Academies Press (US), 2016. <http://www.ncbi.nlm.nih.gov/books/NBK367618/>
55. Cook, Linda S., Mary L. Kamb, and Noel S. Weiss. "Perineal Powder Exposure and the Risk of Ovarian Cancer." *American Journal of Epidemiology* 145, no. 5 (March 1, 1997): 459–65.
56. Cook, LS. "Erratum in 'Perineal Powder Exposure and the Risk of Ovarian Cancer'." *American Journal of Epidemiology* 148, no. 410 (1997).
57. Coussens, Lisa M., and Zena Werb. "Inflammation and Cancer." *Nature* 420, no. 6917 (December 19, 2002): 860–67. <https://doi.org/10.1038/nature01322>.
58. Cramer, Daniel W. and Allison F. Vitonis. "Signatures of Reproductive Events on Blood Counts and Biomarkers of Inflammation: Implications for Chronic Disease Risk." *PLoS ONE* 12(2) (2017).
59. Cramer, D. W. "Perineal Talc Exposure and Subsequent Epithelial Ovarian Cancer: A Case-Control Study." *Obstetrics and Gynecology* 94, no. 1 (July 1999): 160–61.
60. Cramer, D. W., R. F. Liberman, L. Titus-Ernstoff, W. R. Welch, E. R. Greenberg, J. A. Baron, and B. L. Harlow. "Genital Talc Exposure and Risk of Ovarian Cancer." *International Journal of Cancer* 81, no. 3 (May 5, 1999): 351–56.
61. Cramer, D. W., W. R. Welch, R. E. Scully, and C. A. Wojciechowski. "Ovarian Cancer and Talc: A Case-Control Study." *Cancer* 50, no. 2 (July 15, 1982): 372–76.
62. Cramer, Daniel W., Linda Titus-Ernstoff, John R. McKolanis, William R. Welch, Allison F. Vitonis, Ross S. Berkowitz, and Olivera J. Finn. "Conditions Associated with Antibodies Against the Tumor-Associated Antigen MUC1 and Their Relationship to Risk for Ovarian Cancer." *Cancer Epidemiology Biomarkers & Prevention* 14, no. 5 (May 1, 2005): 1125–31.
63. Cramer, Daniel W., Allison F. Vitonis, Kathryn L. Terry, William R. Welch, and Linda J. Titus. "The Association Between Talc Use and Ovarian Cancer: A Retrospective Case-Control Study in Two US States." *Epidemiology (Cambridge, Mass.)* 27, no. 3 (May 2016): 334–46.
64. Cramer, Daniel W., William R. Welch, Ross S. Berkowitz, and John J. Godleski. "Presence of Talc in Pelvic Lymph Nodes of a Woman with Ovarian Cancer and Long-Term Genital Exposure to Cosmetic Talc." *Obstetrics and Gynecology* 110, no. 2 Pt 2 (August 2007): 498–501.
65. Crum, Christopher P, Jonathan Bijron, and Brooke E. Howitt. "Pathogenesis of Ovarian, Fallopian Tubal, and Peritoneal Serous Carcinomas." *UpToDate*, 2018.
66. Crusz, Shanthini M., and Frances R Balkwill. "Inflammation and Cancer: Advances and New Agents." *Nature Reviews Clinical Oncology* 12 (October 2015): 584–96.

67. Curtis D. Klaassen, and John Doull. Casarett and Doull's Toxicology: The Basic Science of Poisons. 8th Edition. McGraw-Hill Education, 2013.
68. "Deposition & Exhibits of John Hopkins, PhD, MDL No. 2738." In re: Talcum Power Prod. Liab. Litig., August 16, 2018.
69. "Deposition & Exhibits of Julie Pier, MDL No. 2738." In re: Talcum Power Prod. Liab. Litig., September 12, 2018.
70. Ding, Yuan C., Lesley McGuffog, Sue Healey, Eitan Friedman, Yael Laitman, Shani- Paluch-Shimon, Bella Kaufman, et al. "A Nonsynonymous Polymorphism in IRS1 Modifies Risk of Developing Breast and Ovarian Cancers in BRCA1 and Ovarian Cancer in BRCA2 Mutation Carriers." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21, no. 8 (August 2012): 1362–70.
71. DiSaia, PJ, WT Creasman, RS Mannell, S McMeekin, and D Mutch. *Clinical Gynecologic Oncology / [Edited by] Philip J. DiSaia, William T. Creasman, Robert S. Mannell, Scott McMeekin, David G. Mutch*. 9th ed. Philadelphia, PA: Elsevier, 2018.
72. Dixon, Suzanne C., Christina M. Nagle, Nicolas Wentzensen, Britton Trabert, Alicia Beeghly-Fadiel, Joellen M. Schildkraut, Kirsten B. Moysich, et al. "Use of Common Analgesic Medications and Ovarian Cancer Survival: Results from a Pooled Analysis in the Ovarian Cancer Association Consortium." *British Journal of Cancer* 116, no. 9 (April 25, 2017): 1223–28.
73. Dodson, R. F., M. O'Sullivan, C. J. Corn, and S. P. Hammar. "Quantitative Comparison of Asbestos and Talc Bodies in an Individual with Mixed Exposure." *American Journal of Industrial Medicine* 27, no. 2 (February 1995): 207–15.
74. D.R. Petterson. "JNJ 000251888," April 26, 1973.
75. Dubeau, L., and R. Drapkin. "Coming into Focus: The Nonovarian Origins of Ovarian Cancer." *Annals of Oncology: Official Journal of the European Society for Medical Oncology* 24 Suppl 8 (November 2013): viii28–35.
76. Dydek, Thomas. "Educational Report of Thomas Dydek, Ph.D., DABT, PE, Regarding the Cancer Causing Constituents of Defendants' Talcum Powder Products, In Re: Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Products Liability Litigation MDL No. 2738," April 9, 2018.
77. Eberl, J. J., and W. L. George. "Comparative Evaluation of the Effects of Talcum and a New Absorbable Substitute on Surgical Gloves." *American Journal of Surgery* 75, no. 3 (March 1948): 493–97.
78. Egilman, David, Joan E. Steffan, Triet Tran, Kate Clancy, Mark Rigler and William Longo. "Health Effects of Censored Elongated Mineral Particles: A Critical Review." *STP* 1618 (2019), 192-239.
79. Egilman D, Madigan D, Yimam M, Tran T. "Evidence that cosmetic talc is a cause of ovarian cancer." *Gynecol Pelvic Med* 2020.
80. Egli, G. E., and M. Newton. "The Transport of Carbon Particles in the Human Female Reproductive Tract." *Fertility and Sterility* 12 (April 1961): 151–55.
81. Eng, Kevin H., J. Brian Szender, John Lewis Etter, Jasmine Kaur, Samantha Poblete, Ruea-Yea Huang, Qianqian Zhu, et al. "Paternal Lineage Early Onset Hereditary Ovarian Cancers: A Familial Ovarian Cancer Registry Study." *PLoS Genetics* 14, no. 2 (February 2018): e1007194.
82. "Expert Report of Michael Crowley, Ph.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738," November 12, 2018.
83. "Expert Report of Anne McTiernan, M.D., Ph.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738," November 16, 2018.

Daniel Clarke-Pearson, M.D.

Materials Considered

84. “Expert Report of Rebecca Smith-Bindman, M.D., In Re: Talcum Powder Prod. Liab. Litig., MDL No. 2738,” November 12, 2018.
85. “Expert Report of Patricia G. Moorman Entitled Scientific Review of the Epidemiologic Evidence on Talc Use and Ovarian Cancer,” dated November 16, 2018.
86. Fasching, Peter A., Simon Gayther, Leigh Pearce, Joellen M. Schildkraut, Ellen Goode, Falk Thiel, Georgia Chenevix-Trench, et al. “Role of Genetic Polymorphisms and Ovarian Cancer Susceptibility.” *Molecular Oncology* 3, no. 2 (April 2009): 171–81.
87. Fathalla, M. F. “Incessant Ovulation and Ovarian Cancer - a Hypothesis Re-Visited.” *Facts, Views & Vision in ObGyn* 5, no. 4 (2013): 292–97.
88. Fathalla, M. F. “Incessant Ovulation--a Factor in Ovarian Neoplasia?” *Lancet* 2, no. 7716 (July 17, 1971): 163.
89. FDA. “Ltr to Samuel S. Epstein, M.D., RE: Docket Numbers 94P-0420 and FDA-2008-P-0309-0001/CP,” April 1, 2017.
90. Fedak, Kristen M., Autumn Bernal, Zachary A. Capshaw, and Sherilyn Gross. “Applying the Bradford Hill Criteria in the 21st Century: How Data Integration Has Changed Causal Inference in Molecular Epidemiology.” *Emerging Themes in Epidemiology* 12, no. 14 (2015).
91. “Federal Register Vol. 81, No.243, December 19, 2016 FDA Ban on Surgical Gloves.” Accessed August 16, 2018.
92. Ferguson, Lynnette R. “Chronic Inflammation and Mutagenesis.” *Mutation Research* 690, no. 1–2 (August 7, 2010): 3–11. <https://doi.org/10.1016/j.mrfmmm.2010.03.007>.
93. Fernandes, José Veríssimo, Ricardo Ney Oliveira Cobucci, Carlos André Nunes Jatobá, Thales. “The Role of the Mediators of Inflammation in Cancer Development.” *Pathol. Oncol. Res.* (2015) 21:527–534.
94. Ferrer, Jaume, Juan F. Montes, Maria A. Villarino, Richard W. Light, and José García-Valero. “Influence of Particle Size on Extrapleural Talc Dissemination after Talc Slurry Pleurodesis.” *Chest* 122, no. 3 (September 2002): 1018–27.
95. Ferrante, Daniela, Marinella Bertolotti, Annalisa Todesco, Dario Mirabelli, Benedetto Terracini, and Corrado Magnani. “Cancer Mortality and Incidence of Mesothelioma in a Cohort of Wives of Asbestos Workers in Casale Monferrato, Italy.” *Environmental Health Perspectives* 115, no. 10 (October 2007): 1401–5. <https://doi.org/10.1289/ehp.10195>.
96. Fiume, Monice M., Ivan Boyer, Wilma F. Bergfeld, Donald V. Belsito, Ronald A. Hill, Curtis D. Klaassen, Daniel C. Liebler, et al. “Safety Assessment of Talc as Used in Cosmetics.” *International Journal of Toxicology* 34, no. 1 suppl (July 1, 2015): 66S-129S.
97. Fletcher, Nicole M., Jimmy Belotte, Mohammed G. Saed, Ira Memaj, Michael P. Diamond, Robert T. Morris, and Ghassan M. Saed. “Specific Point Mutations in Key Redox Enzymes Are Associated with Chemoresistance in Epithelial Ovarian Cancer.” *Free Radical Biology and Medicine* 102 (2017): 122–32. <https://doi.org/10.1016/j.freeradbiomed.2016.11.028>.
98. Fletcher, Nicole M., Zhongliang Jiang, Rouba Ali-Fehmi, Nancy K. Levin, Jimmy Belotte, Michael A. Tainsky, Michael P. Diamond, Husam M. Abu-Soud, and Ghassan M. Saed. “Myeloperoxidase and Free Iron Levels: Potential Biomarkers for Early Detection and Prognosis of Ovarian Cancer.” *Cancer Biomarkers* 10 (2012 2011): 267–75. <https://doi.org/10.3233/CBM-2012-0255>.
99. Fletcher, Nicole, Memaj, Ira, and Saed, Ghassan. “Talcum Powder Enhances Oxidative Stress in Ovarian Cancer Cells.” *Reproductive Sciences*, February 28, 2018.
100. Fletcher, NM, and GM Saed. “Talcum Powder Enhances Cancer Antigen 125 Levels in Ovarian Cancer Cells.” *Presented at the 65th Meeting of the Society for Reproductive Investigation, San Diego, California*, 2018.

Daniel Clarke-Pearson, M.D.

Materials Considered

101. Fletcher, NM, Amy K Harper, Ira Memaj, Rong Fan, Robert T. Morris and GM Saed. “Molecular Basis Supporting the Association of Talcum Powder Use with Increased Risk of Ovarian Cancer.” *Reproductive Sciences* 1-10 (2019).
102. Folkins, Ann K., Elke A. Jarboe, Jonathan L. Hecht, Michael G. Muto, and Christopher P. Crum. “Chapter 24 - Assessing Pelvic Epithelial Cancer Risk and Intercepting Early Malignancy.” In *Diagnostic Gynecologic and Obstetric Pathology (Third Edition)*, 844–64. Philadelphia: Content Repository Only!, 2018. <https://doi.org/10.1016/B978-0-323-44732-4.00024-8>.
103. Ford, D., D.F. Easton, M. Stratton, S. Narod, D. Goldgar, P. Devilee, D.T. Bishop, et al. “Genetic Heterogeneity and Penetrance Analysis of the BRCA1 and BRCA2 Genes in Breast Cancer Families.” *The American Journal of Human Genetics* 62, no. 3 (March 1998): 676–89.
104. Freedman, Ralph S, Michael Deavers, Jinsong Liu, and Ena Wang. “Peritoneal Inflammation – A Microenvironment for Epithelial Ovarian Cancer (EOC).” *Journal of Translational Medicine* 2, no. 23 (2004). <https://doi.org/10.1186/1479-5876-2-23>.
105. Friebe, Tara M., Susan M. Domchek, and Timothy R. Rebbeck. “Modifiers of Cancer Risk in BRCA1 and BRCA2 Mutation Carriers: Systematic Review and Meta-Analysis.” *Journal of the National Cancer Institute* 106, no. 6 (June 2014): dju091. <https://doi.org/10.1093/jnci/dju091>.
106. Frost, G. “The Latency Period of Mesothelioma among a Cohort of British Asbestos Workers (1978-2005).” *British Journal of Cancer* 109, no. 7 (October 1, 2013): 1965–73.
107. Galea, Sandro, and Roger D. Vaughan. “Moving Beyond the Cause Constraint: A Public Health of Consequence, May 2018.” *American Journal of Public Health* 108, no. 5 (May 2018): 602–3.
108. Gates, Margaret A., Bernard A. Rosner, Jonathan L. Hecht, and Shelley S. Tworoger. “Risk Factors for Epithelial Ovarian Cancer by Histologic Subtype.” *American Journal of Epidemiology* 171, no. 1 (January 1, 2010): 45–53. <https://doi.org/10.1093/aje/kwp314>.
109. Gates, Margaret A., Shelley S. Tworoger, Kathryn L. Terry, Linda Titus-Ernstoff, Bernard Rosner, Immaculata De Vivo, Daniel W. Cramer, and Susan E. Hankinson. “Talc Use, Variants of the GSTM1, GSTT1, and NAT2 Genes, and Risk of Epithelial Ovarian Cancer.” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 17, no. 9 (September 2008): 2436–44. <https://doi.org/10.1158/1055-9965.EPI-08-0399>.
110. Genofre, Eduardo H., Francisco S. Vargas, Milena M. P. Acencio, Leila Antonangelo, Lisete R. Teixeira, and Evaldo Marchi. “Talc Pleurodesis: Evidence of Systemic Inflammatory Response to Small Size Talc Particles.” *Respiratory Medicine* 103, no. 1 (January 2009): 91–97.
111. Germani, D., S. Belli, C. Bruno, M. Grignoli, M. Nesti, R. Pirastu, and P. Comba. “Cohort Mortality Study of Women Compensated for Asbestosis in Italy.” *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 129–34.
112. Gertig, D. M., D. J. Hunter, D. W. Cramer, G. A. Colditz, F. E. Speizer, W. C. Willett, and S. E. Hankinson. “Prospective Study of Talc Use and Ovarian Cancer.” *Journal of the National Cancer Institute* 92, no. 3 (February 2, 2000): 249–52.
113. Ghio, Andrew J., Joleen M. Soukup, Lisa A. Dailey, Judy H. Richards, Jennifer L. Turi, Elizabeth N. Pavlisko, and Victor L. Roggli. “Disruption of Iron Homeostasis in Mesothelial Cells after Talc Pleurodesis.” *American Journal of Respiratory Cell and Molecular Biology* 46, no. 1 (January 1, 2012): 80–86. <https://doi.org/10.1165/rcmb.2011-0168OC>.
114. Godard, B., W. D. Foulkes, D. Provencher, J. S. Brunet, P. N. Tonin, A. M. Mes-Masson, S. A. Narod, and P. Ghadirian. “Risk Factors for Familial and Sporadic Ovarian Cancer among French Canadians: A Case-Control Study.” *American Journal of Obstetrics and Gynecology* 179, no. 2 (August 1998): 403–10.

Daniel Clarke-Pearson, M.D.

Materials Considered

115. Gondal, Mohammed A., Mohamed A. Dastageer, Akhtar A. Naqvi, Anvar A. Isab, and Yasin W. Maganda. "Detection of Toxic Metals (Lead and Chromium) in Talcum Powder Using Laser Induced Breakdown Spectroscopy." *Applied Optics* 51, no. 30 (October 20, 2012): 7395–7401.
116. Gonzalez, Nicole L., Katie M. O'Brien, Aimee A. D'Aloisio, Dale P. Sandler, and Clarice R. Weinberg. "Douching, Talc Use, and Risk of Ovarian Cancer." *Epidemiology (Cambridge, Mass.)* 27, no. 6 (2016): 797–802. <https://doi.org/10.1097/EDE.0000000000000528>.
117. Goodman, Marc T, Galina Lurie, Pamela J Thompson, Katharine E McDuffie, and Michael E Carney. "Association of Two Common Single-Nucleotide Polymorphisms in the CYP19A1 Locus and Ovarian Cancer Risk." *Endocrine-Related Cancer* 15, no. 4 (December 2008): 1055–60.
118. Gordon, Ronald E., Sean Fitzgerald, and James Millette. "Asbestos in Commercial Cosmetic Talcum Powder as a Cause of Mesothelioma in Women." *International Journal of Occupational and Environmental Health* 20, no. 4 (October 2014): 318–32.
119. Graham, J. D. P., and M. E. Jenkins. "Value of Modified Starch as a Substitute for Talc." *Lancet (London, England)* 1, no. 6708 (March 22, 1952): 590–91.
120. Graham, J., and R. Graham. "Ovarian Cancer and Asbestos." *Environmental Research* 1, no. 2 (October 1967): 115–28.
121. Green, A., D. Purdie, C. Bain, V. Siskind, P. Russell, M. Quinn, and B. Ward. "Tubal Sterilisation, Hysterectomy and Decreased Risk of Ovarian Cancer. Survey of Women's Health Study Group." *International Journal of Cancer. Journal International Du Cancer* 71, no. 6 (June 11, 1997): 948–51.
122. Grivennikov, Sergei I., Florian R. Greten, and Michael Karin. "Immunity, Inflammation, and Cancer." *Cell* 140, no. 6 (March 19, 2010): 883–99. <https://doi.org/10.1016/j.cell.2010.01.025>.
123. Gross, A. J., and P. H. Berg. "A Meta-Analytical Approach Examining the Potential Relationship between Talc Exposure and Ovarian Cancer." *Journal of Exposure Analysis and Environmental Epidemiology* 5, no. 2 (June 1995): 181–95.
124. Halme, J., M. G. Hammond, J. F. Hulka, S. G. Raj, and L. M. Talbert. "Retrograde Menstruation in Healthy Women and in Patients with Endometriosis." *Obstetrics and Gynecology* 64, no. 2 (August 1984): 151–54.
125. Hamilton, T. C., H. Fox, C. H. Buckley, W. J. Henderson, and K. Griffiths. "Effects of Talc on the Rat Ovary." *British Journal of Experimental Pathology* 65, no. 1 (February 1984): 101–6.
126. Hankinson, S. E., D. J. Hunter, G. A. Colditz, W. C. Willett, M. J. Stampfer, B. Rosner, C. H. Hennekens, and F. E. Speizer. "Tubal Ligation, Hysterectomy, and Risk of Ovarian Cancer. A Prospective Study." *JAMA* 270, no. 23 (December 15, 1993): 2813–18.
127. Harlow, B. L., and P.A. Hartge. "A Review of Perineal Talc Exposure and Risk of Ovarian Cancer." *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 254-60.
128. Harlow, B. L., D. W. Cramer, D. A. Bell, and W. R. Welch. "Perineal Exposure to Talc and Ovarian Cancer Risk." *Obstetrics and Gynecology* 80, no. 1 (July 1992): 19–26.
129. Harlow, B. L., and D. W. Cramer. "Self-Reported Use of Antidepressants or Benzodiazepine Tranquilizers and Risk of Epithelial Ovarian Cancer: Evidence from Two Combined Case-Control Studies (Massachusetts, United States)." *Cancer Causes & Control: CCC* 6, no. 2 (March 1995): 130–34.
130. Hartge, P., R. Hoover, L. P. Leshner, and L. McGowan. "Talc and Ovarian Cancer." *JAMA: The Journal of the American Medical Association* 250, no. 14 (October 14, 1983): 1844.
131. Hasselbalch, Hans Carl. "Chronic Inflammation as a Promotor of Mutagenesis in Essential Thrombocythemia, Polycythemia Vera and Myelofibrosis. A Human Inflammation Model for Cancer Development?" *Leukemia Research* 37, no. 2 (February 2013): 214-20.

Daniel Clarke-Pearson, M.D.

Materials Considered

132. Heller, D. S., R. E. Gordon, and N. Katz. "Correlation of Asbestos Fiber Burdens in Fallopian Tubes and Ovarian Tissue." *American Journal of Obstetrics and Gynecology* 181, no. 2 (August 1999): 346–47.
133. Heller, D. S., R. E. Gordon, C. Westhoff, and S. Gerber. "Asbestos Exposure and Ovarian Fiber Burden." *American Journal of Industrial Medicine* 29, no. 5 (May 1996): 435–39.
134. Heller, D. S., C. Westhoff, R. E. Gordon, and N. Katz. "The Relationship between Perineal Cosmetic Talc Usage and Ovarian Talc Particle Burden." *American Journal of Obstetrics and Gynecology* 174, no. 5 (May 1996): 1507–10.
135. Henderson, W. J., T. C. Hamilton, and K. Griffiths. "Talc in Normal and Malignant Ovarian Tissue." *Lancet* 1, no. 8114 (March 3, 1979): 499.
136. Henderson, W. J., C. A. Joslin, A. C. Turnbull, and K. Griffiths. "Talc and Carcinoma of the Ovary and Cervix." *The Journal of Obstetrics and Gynaecology of the British Commonwealth* 78, no. 3 (March 1971): 266–72.
137. Henderson, W. J., T. C. Hamilton, M. S. Baylis, C. G. Pierrepont, and K. Griffiths. "The Demonstration of the Migration of Talc from the Vagina and Posterior Uterus to the Ovary in the Rat." *Environmental Research* 40, no. 2 (August 1986): 247–50.
138. Hernán, Miguel A. "The C-Word: Scientific Euphemisms Do Not Improve Causal Inference From Observational Data." *American Journal of Public Health* 108, no. 5 (May 2018): 616–19.
139. Hill, Austin Bradford. "The Environment and Disease: Association or Causation?" *Proceedings of the Royal Society of Medicine* 58, no. 5 (May 1965): 295–300.
140. Hillegass, Jedd M., Arti Shukla, Maximilian B. MacPherson, Jeffrey P. Bond, Chad Steele, and Brooke T. Mossman. "Utilization of Gene Profiling and Proteomics to Determine Mineral Pathogenicity in a Human Mesothelial Cell Line (LP9/TERT-1)." *Journal of Toxicology and Environmental Health. Part A* 73, no. 5 (January 2010): 423–36.
141. Hollinger, M. A. "Pulmonary Toxicity of Inhaled and Intravenous Talc." *Toxicology Letters* 52, no. 2 (July 1990): 121–27; discussion 117–119.
142. Houghton, Serena C., Katherine W. Reeves, Susan E. Hankinson, Lori Crawford, Dorothy Lane, Jean Wactawski-Wende, Cynthia A. Thomson, Judith K. Ockene, and Susan R. Sturgeon. "Perineal Powder Use and Risk of Ovarian Cancer." *Journal of the National Cancer Institute* 106, no. 9 (September 2014). <https://doi.org/10.1093/jnci/dju208>.
143. Huncharek, Michael, J. F. Geschwind, and Bruce Kupelnick. "Perineal Application of Cosmetic Talc and Risk of Invasive Epithelial Ovarian Cancer: A Meta-Analysis of 11,933 Subjects from Sixteen Observational Studies." *Anticancer Research* 23, no. 2C (April 2003): 1955–60.
144. Huncharek, Michael, Joshua Muscat, Adedayo Onitilo, and Bruce Kupelnick. "Use of Cosmetic Talc on Contraceptive Diaphragms and Risk of Ovarian Cancer: A Meta-Analysis of Nine Observational Studies." *European Journal of Cancer Prevention: The Official Journal of the European Cancer Prevention Organisation (ECP)* 16, no. 5 (October 2007): 422–29.
145. Hunn, Jessica, and Gustavo C. Rodriguez. "Ovarian Cancer: Etiology, Risk Factors, and Epidemiology." *Clinical Obstetrics and Gynecology* 55, no. 1 (March 2012): 3–23.
146. IARC. "IARC Monographs on the Evaluation of the Carcinogenic Risk to Humans: Man-Made Mineral Fibers and Radon, Volume 43." IARC, Lyon France, 1988.
147. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Cobalt in Hard Metals and Cobalt Sulfate, Gallium Arsenide, Indium Phosphide and Vanadium Pentoxide." *World Health Organization* 86 (2006). <https://monographs.iarc.fr/iarc-monographs-on-the-evaluation-of-carcinogenic-risks-to-humans-35/>.

Daniel Clarke-Pearson, M.D.

Materials Considered

148. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Inorganic and Organic Lead Compounds." *World Health Organization* 87 (2006).
149. "IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans – IARC: Some Traditional Herbal Medicines, Some Mycotoxins, Naphthalene and Styrene" 82 (2002).
150. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 100C," 2012.
151. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. "Carbon Black, Titanium Dioxide, and Talc." *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans / World Health Organization, International Agency for Research on Cancer* 93 (2010): 1– 413.
152. IARC. "IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans: Silica and Some Silicates." IARC, 1987.
153. IARC. "IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans. Overall Evaluations of Carcinogenicity: An Updating of IARC Monographs Volumes 1-42. Supplement 7," 1987. <https://monographs.iarc.fr/wpcontent/uploads/2018/06/Suppl7.pdf>.
151. IMERY209971
152. "Inflammation: A Hidden Path to Breaking the Spell of Ovarian Cancer." *Cell Cycle* 8, no. 19 (2009): 3107–11.
153. Institute of Medicine (IOM) Committee on the State of Science in Ovarian Cancer Research. *Ovarian Cancers: Evolving Paradigms in Research and Care*. The National Academies of Sciences, Engineering and Medicine. Washington (DC): National Academies Press (US), 2016.
154. Institute of Medicine (US) Committee on Asbestos: Selected Health Effects. *Asbestos: Selected Cancers*. The National Academies Collection: Reports Funded by National Institutes of Health. Washington (DC): National Academies Press (US), 2006.
155. Iturralde, M., and P. F. Venter. "Hysterosalpingo-Radionuclide Scintigraphy (HERS)." *Seminars in Nuclear Medicine* 11, no. 4 (October 1981): 301–14.
156. Jaurand, M. C. "Mechanisms of Fiber-Induced Genotoxicity." *Environmental Health Perspectives* 105 Suppl 5 (September 1997): 1073–84.
157. Jaurand. "Particulate-State Carcinogenesis: A Survey of Recent Studies on the Mechanisms of Action of Fibres." *IARC Scientific Publications*, no. 90 (1989): 54–73
158. Jaurand, MC. "Mechanisms of Fibre Genotoxicity." In *Mechanisms in Fibre Carcinogenesis*. New York: Plenum Press, 1991.
159. Jia, D, Y Nagaoka, S Orsulic, and M Katsumata. "Inflammation Is a Key Contributor to Ovarian Cancer Cell Seeding." *Scientific Reports* 8, no. 12394 (August 17, 2018).
160. Jervis, Sarah, Honglin Song, Andrew Lee, Ed Dicks, Jonathan Tyrer, Patricia Harrington, Douglas F. Easton, Ian J. Jacobs, Paul P. D. Pharoah, and Antonis C. Antoniou. "Ovarian Cancer Familial Relative Risks by Tumour Subtypes and by Known Ovarian Cancer Genetic Susceptibility Variants." *Journal of Medical Genetics* 51, no. 2 (February 2014): 108–13.
161. Jiang, Zhongliang, Nicole M. Fletcher, Rouba Ali-Fehmi, Michael P. Diamond, Husam M. Abu-Soud, Adnan R. Munkarah, and Ghassan M. Saed. "Modulation of Redox Signaling Promotes Apoptosis in Epithelial Ovarian Cancer Cells." *Gynecologic Oncology* 122, no. 2 (August 2011): 418–23. <https://doi.org/10.1016/j.ygyno.2011.04.051>.
162. Johnson & Johnson. "A Message about Talc." A message about talc, May 2, 2016.
163. Jones, Richard E. *Human Reproductive Biology, Second Edition*. 2 edition. San Diego: Academic Press, 1997.
164. Jurinski, Joseph B., and J. Donald Rimstidt. "Biodurability of Talc." *American Mineralogist* 86,

Daniel Clarke-Pearson, M.D.

Materials Considered

- no. 4 (April 2001): 392–99. <https://doi.org/10.2138/am-2001-0402>.
165. Kane, AB, P Boffetta, R Saracci, and JD Wilbourn. “Mechanisms of Fibre Carcinogenesis.” IARC, 1996.
166. Kang, N., D. Griffin, and H. Ellis. “The Pathological Effects of Glove and Condom Dusting Powders.” *Journal of Applied Toxicology: JAT* 12, no. 6 (December 1992): 443–49.
167. Karageorgi, Stalo, Margaret A. Gates, Susan E. Hankinson, and Immaculata De Vivo. “Perineal Use of Talcum Powder and Endometrial Cancer Risk.” *Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 19, no. 5 (May 2010): 1269–75.
168. Kasper, C. S., and P. J. Chandler. “Possible Morbidity in Women from Talc on Condoms.” *JAMA: The Journal of the American Medical Association* 273, no. 11 (March 15, 1995): 846–47.
169. Kauff, Noah D., Nandita Mitra, Mark E. Robson, Karen E. Hurley, Shaokun Chuai, Deborah Goldfrank, Eve Wadsworth, et al. “Risk of Ovarian Cancer in BRCA1 and BRCA2 Mutation-Negative Hereditary Breast Cancer Families.” *Journal of the National Cancer Institute* 97, no. 18 (September 21, 2005): 1382–84. <https://doi.org/10.1093/jnci/dji281>.
170. Keal, E. E. “Asbestosis and Abdominal Neoplasms.” *Lancet* 2, no. 7162 (December 3, 1960): 1211–16.
171. Keskin, Nadi, Yasemin Aktan Teksen, Esra Gürlek Ongun, Yusuf Ozay, and Halil Saygili. “Does Long-Term Talc Exposure Have a Carcinogenic Effect on the Female Genital System of Rats? An Experimental Pilot Study.” *Archives of Gynecology and Obstetrics* 280, no. 6 (December 2009): 925–31. <https://doi.org/10.1007/s00404-009-1030-3>.
172. Khan, Mohd Imran, Amogh A. Sahasrabuddhe, Govil Patil, Mohd Javed Akhtar, Mohd Ashquin, and Iqbal Ahmad. “Nano-Talc Stabilizes TNF-Alpha m-RNA in Human Macrophages.” *Biomedical Nanotechnology* 7, no. 1 (2011): 112–13.
173. Kiraly, Orsolya, Guanyu Gong, Werner Olipitz, Sureshkumar Muthupalani, and Bevin P. Engelward. “Inflammation-Induced Cell Proliferation Potentiates DNA Damage-Induced Mutations In Vivo.” *PLoS Genetics*, February 3, 2015.
174. Kissler, Stefan, Ernst Siebzehnuebl, Joachim Kohl, Anja Mueller, Nadja Hamscho, Regine Gaetje, Andre Ahr, Achim Rody, and Manfred Kaufmann. “Uterine Contractility and Directed Sperm Transport Assessed by Hysterosalpingoscintigraphy (HSSG) and Intrauterine Pressure (IUP) Measurement.” *Acta Obstetrica Et Gynecologica Scandinavica* 83, no. 4 (April 2004): 369–74.
175. Kunz, Beil. “The Uterine Peristaltic Pump: Normal and Impeded Sperm Transport within the Female Genital Tract.” *Adv Exp Med Biol* 424 (1997): 267–77.
176. Kurman, Robert J., and Ie-Ming Shih. “The Origin and Pathogenesis of Epithelial Ovarian Cancer: A Proposed Unifying Theory.” *The American Journal of Surgical Pathology* 34, no. 3 (March 2010): 433–43. <https://doi.org/10.1097/PAS.0b013e3181cf3d79>.
177. Kurta, Michelle L., Kirsten B. Moysich, Joel L. Weissfeld, Ada O. Youk, Clareann H. Bunker, Robert P. Edwards, Francesmary Modugno, Roberta B. Ness, and Brenda Diergaarde. “Use of Fertility Drugs and Risk of Ovarian Cancer: Results from a US-Based Case-Control Study.” *Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21, no. 8 (August 2012): 1282–92. <https://doi.org/10.1158/1055-9965.EPI-12-0426>.
178. Lancaster, Johnathan M., C. Bethan Powell, Lee-may Chen, and Debra L. Richardson. “Society of Gynecologic Oncology Statement on Risk Assessment for Inherited Gynecologic Cancer Predispositions.” *Gynecologic Oncology* 136, no. 1 (January 2015): 3–7.

Daniel Clarke-Pearson, M.D.

Materials Considered

179. Landen, Charles N., Michael J. Birrer, and Anil K. Sood. "Early Events in the Pathogenesis of Epithelial Ovarian Cancer." *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 26, no. 6 (February 20, 2008): 995–1005.
180. Langseth, H., S. E. Hankinson, J. Siemiatycki, and E. Weiderpass. "Perineal Use of Talc and Risk of Ovarian Cancer." *Journal of Epidemiology and Community Health* 62, no. 4 (April 2008): 358–60. <https://doi.org/10.1136/jech.2006.047894>.
181. Langseth, H., B. V. Johansen, J. M. Nesland, and K. Kjaerheim. "Asbestos Fibers in Ovarian Tissue from Norwegian Pulp and Paper Workers." *International Journal of Gynecological Cancer: Official Journal of the International Gynecological Cancer Society* 17, no. 1 (February 2007): 44–49. <https://doi.org/10.1111/j.1525-1438.2006.00768.x>.
182. Langseth, Hilde, and Kristina Kjaerheim. "Ovarian Cancer and Occupational Exposure among Pulp and Paper Employees in Norway." *Scandinavian Journal of Work, Environment & Health* 30, no. 5 (October 2004): 356–61.
183. Lanphear, B. P., and C. R. Buncher. "Latent Period for Malignant Mesothelioma of Occupational Origin." *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association* 34, no. 7 (July 1992): 718–21.
184. Lee, Jennifer S., Esther M. John, Valerie McGuire, Anna Felberg, Kimberly L. Ostrow, Richard A. DiCioccio, Frederick P. Li, Alexander Miron, Dee W. West, and Alice S. Whittemore. "Breast and Ovarian Cancer in Relatives of Cancer Patients, with and without BRCA Mutations." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 15, no. 2 (February 2006): 359–63. <https://doi.org/10.1158/1055-9965.EPI-05-0687>.
185. Levanon, Keren, Christopher Crum, and Ronny Drapkin. 2008. "New Insights Into the Pathogenesis of Serous Ovarian Cancer and Its Clinical Impact." *Journal of Clinical Oncology* 26 (32): 5284–93. <https://doi.org/10.1200/JCO.2008.18.1107>.
186. Levy-Lahad, E., and E. Friedman. "Cancer Risks among BRCA1 and BRCA2 Mutation Carriers." *British Journal of Cancer* 96, no. 1 (January 15, 2007): 11–15.
187. Lin, Hui-Wen, Ying-Yueh Tu, Shiyng Yu Lin, Wei-Ju Su, Wei Li Lin, Wei Zer Lin, Shen-Chi Wu, and Yuen-Liang Lai. "Risk of Ovarian Cancer in Women with Pelvic Inflammatory Disease: A Population-Based Study." *The Lancet. Oncology* 12, no. 9 (September 2011): 900–904.
188. Liou, Geou-Yarh, and Peter Storz. "Reactive Oxygen Species in Cancer." *Free Radical Research* 44, no. 5 (May 2010): 476–96. <https://doi.org/10.3109/10715761003667554>.
189. Liu, D. T., and A. Hitchcock. "Endometriosis: Its Association with Retrograde Menstruation, Dysmenorrhoea and Tubal Pathology." *British Journal of Obstetrics and Gynaecology* 93, no. 8 (August 1986): 859–62.
190. Lo-Ciganic, Wei-Hsuan, Janice C. Zgibor, Clareann H. Bunker, Kirsten B. Moysich, Robert P. Edwards, and Roberta B. Ness. "Aspirin, Nonaspirin Nonsteroidal Anti-Inflammatory Drugs, or Acetaminophen and Risk of Ovarian Cancer." *Epidemiology (Cambridge, Mass.)* 23, no. 2 (March 2012): 311–19.
191. Lockey, J. E. "Nonasbestos Fibrous Minerals." *Clinics in Chest Medicine* 2, no. 2 (May 1981): 203–18.
192. Longo, D. L., and R. C. Young. "Cosmetic Talc and Ovarian Cancer." *Lancet* 2, no. 8138 (August 18, 1979): 349–51.
193. Longo, William E., and Mark W. Rigler. "The Analysis of Johnson & Johnson's Historical Baby Powder & Shower to Shower Products from the 1960's to the Early 1990's for Amphibole Asbestos," November 14, 2018.

Daniel Clarke-Pearson, M.D.

Materials Considered

194. Lu, Haitian. "Inflammation, a Key Event in Cancer Development," 2006, 221–33.
195. Madsen, Cecilie, Louise Baandrup, Christian Dehlendorff, and Susanne K. Kjaer. "Tubal Ligation and Salpingectomy and the Risk of Epithelial Ovarian Cancer and Borderline Ovarian Tumors: A Nationwide Case-Control Study." *Acta Obstetrica Et Gynecologica Scandinavica* 94, no. 1 (January 2015): 86–94.
196. Magnani, C., D. Ferrante, F. Barone-Adesi, M. Bertolotti, A. Todesco, D. Mirabelli, and B. Terracini. "Cancer Risk after Cessation of Asbestos Exposure: A Cohort Study of Italian Asbestos Cement Workers." *Occupational and Environmental Medicine* 65, no. 3 (March 2008): 164–70.
197. Maharaj-Gentry, Aleksandra, Michelle Griffin and Usha Menon. *Cancer Prevention and Screening: Concepts, Principles and Controversies*. In Rosalind A. Eeles, Christine D. Berg, and Jeffery S. Tobias (Eds.). 1st ed. Chapter 23. Accessed August 21, 2018.
198. Mallen, Adrienne R., Mary K. Townsend, and Shelley S. Tworoger. "Risk Factors for Ovarian Carcinoma." *Hematology/Oncology Clinics of North America*, September 2018.
199. Marie Mc Cullough. "Condom Makers Stop Using Talc." *Asbury Park Press*. January 16, 1996.
200. Mattenklott, M. "Asbestos in Talc Powders and in Soapstone - The Present State." *Staub, Reinhaltung Der Luft* 67 (July 1, 2007): 287–92.
201. McCullough, Marie. "Women's Health Concerns Prompt Condom Makers to Stop Using Talc." *Jersey Journal*. April 17, 1996, City Edition edition.
202. McLaughlin-Drubin, Margaret E., and Karl Munger. "Viruses Associated with Human Cancer." *Biochimica et Biophysica Acta* 1782, no. 3 (March 2008): 127–50.
203. McLemore, Miaskowski, Chen Aouizerat, and Dodd. "Epidemiological and Genetic Factors Associated With Ovarian Cancer." *Cancer Nursing* 32, no. 4 (2009): 281–88.
204. Melaiu, Ombretta, Federica Gemignani, and Stefano Landi. "The Genetic Susceptibility in the Development of Malignant Pleural Mesothelioma." *Journal of Thoracic Disease* 10, no. Suppl 2 (January 2018): S246–52.
205. Meng, Qingsong, Weixue Sun, John Jiang, Nicole M. Fletcher, Michael P. Diamond, and Ghassan M. Saed. "Identification of Common Mechanisms between Endometriosis and Ovarian Cancer." *Journal of Assisted Reproduction and Genetics* 28 (2011): 917–23.
206. Merritt, Melissa A., Adèle C. Green, Christina M. Nagle, Penelope M. Webb, Australian Cancer Study (Ovarian Cancer), and Australian Ovarian Cancer Study Group. "Talcum Powder, Chronic Pelvic Inflammation and NSAIDs in Relation to Risk of Epithelial Ovarian Cancer." *International Journal of Cancer. Journal International Du Cancer* 122, no. 1 (January 1, 2008): 170–76.
207. Miller, Diane M, and Jessica N. McAlpine. "Opportunistic Salpingectomy for Ovarian, Fallopian Tubal, and Peritoneal Carcinoma Risk Reduction." *UpToDate*, 2018.
208. Mills, Paul K., Deborah G. Riordan, Rosemary D. Cress, and Heather A. Young. "Perineal Talc Exposure and Epithelial Ovarian Cancer Risk in the Central Valley of California." *International Journal of Cancer. Journal International Du Cancer* 112, no. 3 (November 10, 2004): 458–64.
209. Milne, Roger L., and Antonis C. Antoniou. "Modifiers of Breast and Ovarian Cancer Risks for BRCA1 and BRCA2 Mutation Carriers." *Endocrine-Related Cancer* 23, no. 10 (2016): T69-84.
210. Moller, Danielsen, and Roursgaard Jantzen. "Oxidatively Damaged DNA in Animals Exposed to Particles." *Critical Reviews in Toxicology* 43, no. 2 (2013): 96–118.
211. Moon, Min Chaul, Jung Duck Park, Byung Soon Choi, So Young Park, Dong Won Kim, Yong Hyun Chung, Naomi Hisanaga, and Il Je Yu. "Risk Assessment of Baby Powder Exposure through Inhalation." *Toxicological Research* 27, no. 3 (September 2011): 137–41.

Daniel Clarke-Pearson, M.D.

Materials Considered

212. Moorman, Patricia G., Rachel T. Palmieri, Lucy Akushevich, Andrew Berchuck, and Joellen M. Schildkraut. "Ovarian Cancer Risk Factors in African-American and White Women." *American Journal of Epidemiology* 170, no. 5 (September 1, 2009): 598–606.
213. Mostafa, S. A., C. B. Barger, R. W. Flower, N. B. Rosenshein, T. H. Parmley, and J. D. Woodruff. "Foreign Body Granulomas in Normal Ovaries." *Obstetrics and Gynecology* 66, no. 5 (November 1985): 701–2.
214. Murphy, Megan A., Britton Trabert, Hannah P. Yang, Yikyung Park, Louise A. Brinton, Patricia Hartge, Mark E. Sherman, Albert Hollenbeck, and Nicolas Wentzensen. "Non-Steroidal Anti-Inflammatory Drug Use and Ovarian Cancer Risk: Findings from the NIH-AARP Diet and Health Study and Systematic Review." *Cancer Causes & Control: CCC* 23, no. 11 (November 2012): 1839–52.
215. Muscat, J. E., and M. S. Huncharek. "Causation and Disease: Biomedical Science in Toxic Tort Litigation." *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association* 31, no. 12 (December 1989): 997–1002.
216. Nadler, Diana L., and Igor G. Zurbenko. "Estimating Cancer Latency Times Using a Weibull Model," 2014, 8.
217. Narod, Steven A. "Talc and Ovarian Cancer." *Gynecologic Oncology* 141, no. 3 (2016): 410–12.
218. National Cancer Institute, Surveillance, Epidemiology, and End Results Program. "Cancer Stat Facts: Ovarian Cancer," 2018.
219. National Center for Health Research. "Does Talcum Powder Cause Ovarian Cancer?" *The Voice: For Prevention, Treatment, and Policy*, Spring/Summer 2018, 32 edition.
220. National Center for Health Research. "Talcum Powder and Ovarian Cancer." *National Center for Health Research* (blog), April 13, 2018. <http://www.center4research.org/talcum-powder-ovarian-cancer/>.
221. Nelson, Heather H., and Karl T. Kelsey. "The Molecular Epidemiology of Asbestos and Tobacco in Lung Cancer." *Oncogene* 21, no. 48 (October 21, 2002): 7284–88.
222. Ness, R. B., and C. Cottréau. "Possible Role of Ovarian Epithelial Inflammation in Ovarian Cancer." *Journal of the National Cancer Institute* 91, no. 17 (September 1, 1999): 1459–67.
223. Ness, R. B., J. A. Grisso, C. Cottréau, J. Klapper, R. Vergona, J. E. Wheeler, M. Morgan, and J. J. Schlesselman. "Factors Related to Inflammation of the Ovarian Epithelium and Risk of Ovarian Cancer." *Epidemiology (Cambridge, Mass.)* 11, no. 2 (March 2000): 111–17.
224. Newhouse, M L, Berry, G., and J. C. Wagner. "Mortality of Factory Workers in East London 1933-80." *British Journal of Industrial Medicine* 42, no. 1 (January 1985): 4–11.
225. Newhouse, M. L., G. Berry, J. C. Wagner, and M. E. Turok. "A Study of the Mortality of Female Asbestos Workers." *British Journal of Industrial Medicine* 29, no. 2 (April 1972): 134–41.
226. NIOSH. "CDC – Occupational Cancer – Carcinogen List – NIOSH Safety and Health Topic," April 24, 2017. <https://www.cdc.gov/niosh/topics/cancer/npotocca.html>.
227. NIOSH. "DHHS (NIOSH) Publication No. 86-102," September 1981.
228. NIOSH. "Fiber Exposure during Use of Baby Powders, Report No. IWS-36-6.," July 1972.
229. NIOSH 2011 Current Intelligence Bulletin No. 62, 2011. N
230. NIOSHTIC-2 Publications Search - 00106056 - Fiber Exposure during Use of Baby Powders, Report No. IWS-36-6. Accessed August 16, 2018. <https://www.cdc.gov/niosh/nioshtic-2/00106056.html>.
231. NIOSHTIC-2 Publications Search - 00106056 – Fiber.

Daniel Clarke-Pearson, M.D.

Materials Considered

232. Norquist, Barbara M., Maria I. Harrell, Mark F. Brady, Tom Walsh, Ming K. Lee, Suleyman Gulsuner, Sarah S. Bernards, et al. "Inherited Mutations in Women With Ovarian Carcinoma." *JAMA Oncology* 2, no. 4 (April 2016): 482–90.
233. NTP. "NTP Technical Report on the Toxicology and Carcinogenesis Studies of Benzophenone (CAS No. 119-61-9) In F344/N Rats and B6C3F1 Mice," February 2006.
234. "NTP Toxicology and Carcinogenesis Studies of Talc (CAS No. 14807-96-6)(NonAsbestiform) in F344/N.Rats and B6C3F1 Mice (Inhalation Studies)," 1993.
235. Nutrition, Center for Food Safety and Applied. "Potential Contaminants - FDA's Testing of Cosmetics for Arsenic, Cadmium, Chromium, Cobalt, Lead, Mercury, and Nickel Content." WebContent. Accessed August 16, 2018.
236. Okada, Futoshi. "Beyond Foreign-Body-Induced Carcinogenesis: Impact of Reactive Oxygen Species Derived from Inflammatory Cells in Tumorigenic Conversion and Tumor Progression." *International Journal of Cancer* 121, no. 11 (December 1, 2007): 2364–72.
237. "OSHA Factsheet: Asbestos," 2014. <https://www.osha.gov/SLTC/asbestos/>.
238. Paoletti, L., S. Caiazza, G. Donelli, and F. Pocchiari. "Evaluation by Electron Microscopy Techniques of Asbestos Contamination in Industrial, Cosmetic, and Pharmaceutical Talcs." *Regulatory Toxicology and Pharmacology: RTP* 4, no. 3 (September 1984): 222–35.
239. Parmley, T. H., and J. D. Woodruff. "The Ovarian Mesothelioma." *American Journal of Obstetrics and Gynecology* 120, no. 2 (September 15, 1974): 234–41.
240. *Pathology of Asbestos-Associated Diseases*. Accessed October 14, 2014.
241. Pearce, Celeste Leigh, Claire Templeman, Mary Anne Rossing, Alice Lee, Aimee M Near, Penelope M Webb, Christina M Nagle, et al. "Association between Endometriosis and Risk of Histological Subtypes of Ovarian Cancer: A Pooled Analysis of Case–Control Studies." *The Lancet Oncology* 13, no. 4 (April 2012): 385–94.
242. Pejovic, Tanja, and Farr Nezhat. "Missing Link: Inflammation and Ovarian Cancer." *The Lancet. Oncology* 12, no. 9 (September 2011): 833–34. [https://doi.org/10.1016/S1470-2045\(11\)70203-0](https://doi.org/10.1016/S1470-2045(11)70203-0).
243. Penninkilampi, Ross, and Guy D. Eslick. "Perineal Talc Use and Ovarian Cancer: A Systematic Review and Meta-Analysis." *Epidemiology (Cambridge, Mass.)* 29, no. 1 (January 2018): 41–49.
244. Peres, Lauren C., et al. "Analgesic Medication Use and Risk of Epithelial Ovarian Cancer in African American Women." *British Journal of Cancer* no. 114 (2016): 819-25.
245. Peshkin, B., and et al. "Genetic Counseling and Testing for Hereditary Breast and Ovarian Cancer - UpToDate," 2018..
246. Peshkin. "Overview of Hereditary Breast and Ovarian Cancer Syndromes - UpToDate," 2018.
247. Peshkin. "Prevalence of BRCA1 and BRCA2 Mutations and Associated Cancer Risks - UpToDate," 2018.
248. Phillips, J. C., P. J. Young, K. Hardy, and S. D. Gangolli. "Studies on the Absorption and Disposition of 3H-Labelled Talc in the Rat, Mouse, Guinea-Pig and Rabbit." *Food and Cosmetics Toxicology* 16, no. 2 (April 1978): 161–63.
249. Pike, Malcom C., et al. "Hormonal Factors and the Risk of Invasive Ovarian Cancer: a Population-Based Case-Control Study." *Fertility and Sterility* vol. 82, no. 1 (2004): 186-195.
250. Pira, E., C. Pelucchi, L. Buffoni, A. Palmas, M. Turbiglio, E. Negri, P. G. Piolatto, and C. La Vecchia. "Cancer Mortality in a Cohort of Asbestos Textile Workers." *British Journal of Cancer* 92, no. 3 (February 14, 2005): 580–86. <https://doi.org/10.1038/sj.bjc.6602240>.
251. Pira, Enrico, Canzio Romano, Francesco S. Violante, Andrea Farioli, Giovanna Spatari, Carlo La Vecchia, and Paolo Boffetta. "Updated Mortality Study of a Cohort of Asbestos Textile Workers." *Cancer Medicine* 5, no. 9 (2016): 2623–28. <https://doi.org/10.1002/cam4.824>.

Daniel Clarke-Pearson, M.D.

Materials Considered

252. Porro, F. W., and N. M. Levine. "Pathology of Talc Pneumoconiosis with Report of an Autopsy." *Northern New York Medical Journal* 3 (April 1946): 23–25.
253. *Product: \*2017 TLVs and BEIs: ACGIH*. Accessed August 16, 2018.
254. *Product: Asbestos: TLV(R) Chemical Substances 7th Edition Documentation: ACGIH*. Accessed August 16, 2018.
255. Psooy, Karen and Jason P. Archambault. "Vaginal Entrapment of Bathwater: A Source of Extra-Urethral Incontinence." *Can Urol Assoc J* Vol. 4, no. 5 (2010): E123-26.
256. Pukkala, Eero, Jan Ivar Martinsen, Elsebeth Lynge, Holmfridur Kolbrun Gunnarsdottir, Pär Sparén, Laufey Tryggvadottir, Elisabete Weiderpass, and Kristina Kjaerheim. "Occupation and Cancer - Follow-up of 15 Million People in Five Nordic Countries." *Acta Oncologica (Stockholm, Sweden)* 48, no. 5 (2009): 646–790. <https://doi.org/10.1080/02841860902913546>.
257. Purdie, D., A. Green, C. Bain, V. Siskind, B. Ward, N. Hacker, M. Quinn, G. Wright, P. Russell, and B. Susil. "Reproductive and Other Factors and Risk of Epithelial Ovarian Cancer: An Australian Case-Control Study. Survey of Women's Health Study Group." *International Journal of Cancer. Journal International Du Cancer* 62, no. 6 (September 15, 1995): 678–84.
258. Purdie, David M., Christopher J. Bain, Victor Siskind, Penelope M. Webb, and Adèle C. Green. "Ovulation and Risk of Epithelial Ovarian Cancer." *International Journal of Cancer. Journal International Du Cancer* 104, no. 2 (March 20, 2003): 228–32. <https://doi.org/10.1002/ijc.10927>.
259. Radic, I, I Vucak, J Milosevic, A Marusic, S Vukicevic, and M Marusic. "Immunosuppression Induced by Talc Granulomatosis in the Rat." *Clinical and Experimental Immunology* 73, no. 2 (August 1988): 316–21.
260. Ramus, Susan J., Antonis C. Antoniou, Karoline B. Kuchenbaecker, Penny Soucy, Jonathan Beesley, Xiaoqing Chen, Lesley McGuffog, et al. "Ovarian Cancer Susceptibility Alleles and Risk of Ovarian Cancer in BRCA1 and BRCA2 Mutation Carriers." *Human Mutation* 33, no. 4 (April 2012): 690–702.
261. Rasmussen, C. B., et al. "Pelvic Inflammatory Disease and the Risk of Ovarian Cancer and Borderline Ovarian Tumors: A Pooled Analysis of 13 Case-Control Studies." *Am J Epidemiol.* 185, no. 1 (2017): 8-20.
262. Rebbeck, Timothy R., Nandita Mitra, Fei Wan, Olga M. Sinilnikova, Sue Healey, Lesley McGuffog, Sylvie Mazoyer, et al. "Association of Type and Location of BRCA1 and BRCA2 Mutations with Risk of Breast and Ovarian Cancer." *JAMA* 313, no. 13 (April 7, 2015): 1347–61.
263. "Reference Manual on Scientific Evidence" Third Edition (2011).
264. REHMAN, GHANA, IFTIKHAR HUSSAIN BUKHARI, MUHAMMAD RIAZ, NASIR RASOOL, UZMA SATTAR, and HAFIZA SUMAIRA MANZOOR. "DETERMINATION OF TOXIC HEAVY METALS IN DIFFERENT BRANDS OF TALCUM POWDER." *International Journal of Applied and Natural Sciences (IJANS)* 2, no. 2 (May 2013): 8.
265. Reid, A., J. Heyworth, N. de Klerk, and A. W. Musk. "The Mortality of Women Exposed Environmentally and Domestically to Blue Asbestos at Wittenoom, Western Australia." *Occupational and Environmental Medicine* 65, no. 11 (November 2008): 743–49.
266. Reid, A., N. H. de Klerk, C. Magnani, D. Ferrante, G. Berry, A. W. Musk, and E. Merler. "Mesothelioma Risk after 40 Years since First Exposure to Asbestos: A Pooled Analysis." *Thorax* 69, no. 9 (September 2014): 843–50. <https://doi.org/10.1136/thoraxjnl-2013-204161>.
267. Reid, Alison, Nick de Klerk, and Arthur W. (Bill) Musk. "Does Exposure to Asbestos Cause Ovarian Cancer? A Systematic Literature Review and Meta-Analysis." *Cancer Epidemiology Biomarkers & Prevention* 20, no. 7 (July 1, 2011): 1287–95.

Daniel Clarke-Pearson, M.D.

Materials Considered

268. Reid, Alison, Amanda Segal, Jane S. Heyworth, Nicholas H. de Klerk, and Arthur W. Musk. "Gynecologic and Breast Cancers in Women after Exposure to Blue Asbestos at Wittenoom." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 18, no. 1 (January 2009): 140–47. <https://doi.org/10.1158/1055-9965.EPI-08-0746>.
269. Reid, Brett M., Jennifer B. Permuth, and Thomas A. Sellers. "Epidemiology of Ovarian Cancer: A Review." *Cancer Biology & Medicine* 14, no. 1 (February 2017): 9–32.
270. Reuter, Simone, Subash C. Gupta, Madan M. Chaturvedi, and Bharat B. Aggarwal. "Oxidative Stress, Inflammation, and Cancer: How Are They Linked?" *Free Radical Biology and Medicine* 49, no. 11 (December 1, 2010): 1603–16.
271. "Revised Draft NIOSH CURRENT INTELLIGENCE BULLETIN Asbestos Fibers and Other Elongated Mineral Particles: State of the Science and Roadmap for Research," January 2009.
272. Rice, Megan S., Susan E. Hankinson, and Shelley S. Tworoger. "Tubal Ligation, Hysterectomy, Unilateral Oophorectomy, and Risk of Ovarian Cancer in the Nurses' Health Studies." *Fertility and Sterility* 102, no. 1 (July 2014): 192-198.e3.
273. Ring, Kari L., Christine Garcia, Martha H. Thomas, and Susan C. Modesitt. "Current and Future Role of Genetic Screening in Gynecologic Malignancies." *American Journal of Obstetrics and Gynecology* 217, no. 5 (2017): 512–21. <https://doi.org/10.1016/j.ajog.2017.04.011>.
274. Riska, A., J. I. Martinsen, K. Kjaerheim, E. Lyng, P. Sparen, L. Tryggvadottir, E. Weiderpass, and E. Pukkala. "Occupation and Risk of Primary Fallopian Tube Carcinoma in Nordic Countries." *International Journal of Cancer* 131, no. 1 (July 1, 2012): 186–92.
275. Rohl, A. N. "Asbestos in Talc." *Environmental Health Perspectives* 9 (December 1974): 129–32.
276. Rohl, A. N., A. M. Langer, I. J. Selikoff, A. Tordini, R. Klimentidis, D. R. Bowes, and D. L. Skinner. "Consumer Talcums and Powders: Mineral and Chemical Characterization." *Journal of Toxicology and Environmental Health* 2, no. 2 (November 1976): 255–84.
277. Roodhouse Gloyne, S. "Two Cases of Squamous Carcinoma of the Lung Occurring in Asbestosis." *Tubercle* 17, no. 1 (October 1, 1935): 5-IN2. [https://doi.org/10.1016/S0041-3879\(35\)80795-2](https://doi.org/10.1016/S0041-3879(35)80795-2).
278. Rosenblatt, K. A., M. Szklo, and N. B. Rosenshein. "Mineral Fiber Exposure and the Development of Ovarian Cancer." *Gynecologic Oncology* 45, no. 1 (April 1992): 20–25.
279. Rosenblatt, Karin A., Noel S. Weiss, Kara L. Cushing-Haugen, Kristine G. Wicklund, and Mary Anne Rossing. "Genital Powder Exposure and the Risk of Epithelial Ovarian Cancer." *Cancer Causes & Control: CCC* 22, no. 5 (May 2011): 737–42.
280. Rösler, J. A., H. J. Woitowitz, H. J. Lange, R. H. Woitowitz, K. Ulm, and K. Rödelberger. "Mortality Rates in a Female Cohort Following Asbestos Exposure in Germany." *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association* 36, no. 8 (August 1994): 889–93.
281. Ross, M. "Geology, Asbestos, and Health." *Environmental Health Perspectives* 9 (December 1974): 123–24.
282. Rothman, Kenneth J., Sander Greenland, and Timothy L. Lash. *Modern Epidemiology*. Lippincott Williams & Wilkins, 2008.
283. Rothman, Kenneth J. "Six Persistent Research Misconceptions." *J Gen Intern Med* 29, no. 7 (2014):1060-4.
284. Saed, Ghassan M., Rouba Ali-Fehmi, Zhong L. Jiang, Nicole M. Fletcher, Michael P. Diamond, Husam M. Abu-Soud, and Adnan R. Munkarah. "Myeloperoxidase Serves as a Redox Switch That

Daniel Clarke-Pearson, M.D.

Materials Considered

- Regulates Apoptosis in Epithelial Ovarian Cancer.” *Gynecologic Oncology* 116, no. 2 (February 2010): 276–81. <https://doi.org/10.1016/j.ygyno.2009.11.004>.
285. Saed, Ghassan M., Michael P. Diamond, and Nicole M. Fletcher. “Updates of the Role of Oxidative Stress in the Pathogenesis of Ovarian Cancer.” *Gynecologic Oncology* 145, no. 3 (June 2017): 595–602. <https://doi.org/10.1016/j.ygyno.2017.02.033>.
286. Saed, Ghassan M., Nicole M. Fletcher, Michael P. Diamond, Robert T. Morris, Nardhy Gomez-Lopez, and Ira Memaj. “Novel Expression of CD11b in Epithelial Ovarian Cancer: Potential Therapeutic Target.” *Gynecologic Oncology* 148, no. 3 (2018): 567–75.
287. Saed, Ghassan M., Robert T. Morris, and Nicole M. Fletcher. *New Insights into the Pathogenesis of Ovarian Cancer: Oxidative Stress*, 2018.
288. Schildkraut, Joellen M., Sarah E. Abbott, Anthony J. Alberg, Elisa V. Bandera, Jill S. Barnholtz-Sloan, Melissa L. Bondy, Michele L. Cote, et al. “Association between Body Powder Use and Ovarian Cancer: The African American Cancer Epidemiology Study (AACES).” *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 25, no. 10 (2016): 1411–17. <https://doi.org/10.1158/1055-9965.EPI-15-1281>.
289. Seeler, Albert O. “Toxic Hazards: Talc Pneumoconiosis.” *New England Journal of Medicine* 261, no. 21 (November 19, 1959): 1084–85. <https://doi.org/10.1056/NEJM195911192612115>.
290. SEER Cancer Statistics Review, 1975-2015, National Cancer Institute, Bethesda, MD, Based on November 2017 SEER Data Submission, Posted to the SEER Web Site, April 2018.
291. Selikoff, I. J., J. Churg, and E. C. Hammond. “Asbestos Exposure and Neoplasia.” *JAMA* 188 (April 6, 1964): 22–26.
292. Shan, Weiwei, and Jinsong Liu. “Inflammation: A Hidden Path to Breaking the Spell of Ovarian Cancer.” *Cell Cycle* 8, no. 19 (2009): 3107–11. <https://doi.org/10.4161/cc.8.19.9590>.
293. Shukla, Arti, Maximilian B. MacPherson, Jedd Hillegass, Maria E. Ramos-Nino, Vlada Alexeeva, Pamela M. Vacek, Jeffrey P. Bond, Harvey I. Pass, Chad Steele, and Brooke T. Mossman. “Alterations in Gene Expression in Human Mesothelial Cells Correlate with Mineral Pathogenicity.” *American Journal of Respiratory Cell and Molecular Biology* 41, no. 1 (July 2009): 114–23. <https://doi.org/10.1165/rcmb.2008-0146OC>.
294. Shushan, A., O. Paltiel, J. Iscovich, U. Elchalal, T. Peretz, and J. G. Schenker. “Human Menopausal Gonadotropin and the Risk of Epithelial Ovarian Cancer.” *Fertility and Sterility* 65, no. 1 (January 1996): 13–18.
295. Sjösten, A. C. E., H. Ellis, and G. a. B. Edelstam. “Retrograde Migration of Glove Powder in the Human Female Genital Tract.” *Human Reproduction* 19, no. 4 (April 1, 2004): 991–95.
296. Stanton, M. F., M. Layard, A. Tegeris, E. Miller, M. May, E. Morgan, and A. Smith. “Relation of Particle Dimension to Carcinogenicity in Amphibole Asbestos and Other Fibrous Minerals.” *Journal of the National Cancer Institute* 67, no. 5 (November 1981): 965–75.
297. Steiling, W., M. Bascompta, P. Carthew, G. Catalano, N. Corea, A. D’Haese, P. Jackson, et al. “Principle Considerations for the Risk Assessment of Sprayed Consumer Products.” *Toxicology Letters* 227, no. 1 (May 16, 2014): 41–49.
298. Stewart, Louise M., C. D’Arcy J. Holman, Patrick Aboagye-Sarfo, Judith C. Finn, David B. Preen, and Roger Hart. “In Vitro Fertilization, Endometriosis, Nulliparity and Ovarian Cancer Risk.” *Gynecologic Oncology* 128, no. 2 (February 2013): 260–64.
299. Stewart, Louise M., Katrina Spilsbury, Susan Jordan, Colin Stewart, C. D’Arcy J. Holman, Aime Powell, Joanne Reekie, and Paul Cohen. “Risk of High-Grade Serous Ovarian Cancer Associated

Daniel Clarke-Pearson, M.D.

Materials Considered

- with Pelvic Inflammatory Disease, Parity and Breast Cancer.” *Cancer Epidemiology* 55 (August 2018): 110–16.
300. Straif, Kurt. “Update of the Scientific Evidence on Asbestos and Cancer.” presented at the International Conference on Environmental and Occupational Determinants of Cancer: Interventions for Primary Prevention, Asturias (Avilés, Gijón), Spain, March 17, 2011.
  301. Taher, M. K., et al. “Critical Review of the Association Between Perineal Use of Talc Powder and Risk of Ovarian Cancer.” *Reproductive Toxicology* 90 (2019): 88-101.
  302. “Talc.” IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans 42 (1987): 185–224.
  303. Tarchi, M., D. Orsi, P. Comba, M. De Santis, R. Pirastu, G. Battista, and M. Valiani. “Cohort Mortality Study of Rock Salt Workers in Italy.” *American Journal of Industrial Medicine* 25, no. 2 (February 1994): 251–56.
  304. Taskin, Salih, et al. “Malignant Peritoneal Mesothelioma Presented as Peritoneal Adenocarcinoma or Primary Ovarian Cancer: Case Series and Review of the Clinical and Immunohistochemical Features.” *Int J Clin Exp Pathol* 5, no. 5 (2012): 472-78.
  305. Terry, Kathryn L., Stalo Karageorgi, Yurii B. Shvetsov, Melissa A. Merritt, Galina Lurie, Pamela J. Thompson, Michael E. Carney, et al. “Genital Powder Use and Risk of Ovarian Cancer: A Pooled Analysis of 8,525 Cases and 9,859 Controls.” *Cancer Prevention Research (Philadelphia, Pa.)* 6, no. 8 (August 2013): 811–21. <https://doi.org/10.1158/1940-6207.CAPR-13-0037>.
  306. Thomas, Charles A., and Major G. Seelig. Powder lubricated surgeon’s rubber glove. United States US2621333A, filed June 27, 1947, and issued December 16, 1952.
  307. Torre, Lindsey A., Britton Trabert, Carol E. DeSantis, Kimberly D. Miller, Goli Samimi, Carolyn D. Runowicz, Mia M. Gaudet, Ahmedin Jemal, and Rebecca L. Siegel. “Ovarian Cancer Statistics, 2018.” *CA: A Cancer Journal for Clinicians* 68, no. 4 (July 2018): 284–96.
  308. Trabert, Britton, Elizabeth M. Poole, Emily White, Kala Visvanathan, Hans-Olov Adami, Garnet L. Anderson, Theodore M. Brasky, et al. “Analgesic Use and Ovarian Cancer Risk: An Analysis in the Ovarian Cancer Cohort Consortium.” *Journal of the National Cancer Institute* 111, no. 2 (2019).
  309. Trabert, Britton. “Body Powder and Ovarian Cancer Risk – What Is the Role of Recall Bias?” *Cancer Epidemiology, Biomarkers & Prevention : A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 25, no. 10 (October 2016): 1369–70.
  310. Trabert, Britton, Ligia Pinto, Patricia Hartge, Troy Kemp, Amanda Black, Mark E. Sherman, Louise A. Brinton, et al. “Pre-Diagnostic Serum Levels of Inflammation Markers and Risk of Ovarian Cancer in the Prostate, Lung, Colorectal and Ovarian Cancer (PLCO) Screening Trial.” *Gynecologic Oncology* 135, no. 2 (November 2014): 297–304.
  311. Tsilidis, K K, N E Allen, T J Key, L Dossus, A Lukanova, K Bakken, E Lund, et al. “Oral Contraceptive Use and Reproductive Factors and Risk of Ovarian Cancer in the European Prospective Investigation into Cancer and Nutrition.” *British Journal of Cancer* 105, no. 9 (October 25, 2011): 1436–42.
  312. Tsilidis, Konstantinos K., Naomi E. Allen, Timothy J. Key, Laure Dossus, Rudolf Kaaks, Kjersti Bakken, Eiliv Lund, et al. “Menopausal Hormone Therapy and Risk of Ovarian Cancer in the European Prospective Investigation into Cancer and Nutrition.” *Cancer Causes & Control: CCC* 22, no. 8 (August 2011): 1075–84.
  313. Tworoger, Shelley S., Kathleen M. Fairfield, Graham A. Colditz, Bernard A. Rosner, and Susan

Daniel Clarke-Pearson, M.D.

Materials Considered

- E. Hankinson. "Association of Oral Contraceptive Use, Other Contraceptive Methods, and Infertility with Ovarian Cancer Risk." *American Journal of Epidemiology* 166, no. 8 (October 15, 2007): 894–901.
314. Tzonou, A., A. Polychronopoulou, C. C. Hsieh, A. Rebelakos, A. Karakatsani, and D. Trichopoulos. "Hair Dyes, Analgesics, Tranquilizers and Perineal Talc Application as Risk Factors for Ovarian Cancer." *International Journal of Cancer. Journal International Du Cancer* 55, no. 3 (September 30, 1993): 408–10.
315. US EPA National Center for Environmental Assessment, Immediate Office, and Reeder Sams. "IRIS Toxicological Review of Inorganic Arsenic (Cancer) (2010 External Review Draft)." Reports & Assessments, 1995. [https://cfpub.epa.gov/ncea/iris\\_drafts/recordisplay.cfm?deid=219111](https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=219111).
316. US EPA, ORD. "4-Methylphenol CASRN 106-44-5 | IRIS | US EPA, ORD," 1990.
317. Vallyathan, N. V., and J. E. Craighead. "Pulmonary Pathology in Workers Exposed to Nonasbestiform Talc." *Human Pathology* 12, no. 1 (January 1981): 28–35.
318. Van Gosen, B. S., H.A. Lowers, S.J. Sutley, and C.A. Gent. "Using the Geologic Setting of Talc Deposits as an Indicator of Amphibole Asbestos Content." *Environmental Geology* 45, no. 7 (2004): 20. <https://doi.org/10.1007/s00254-003-0955-2>.
319. Vanderhyden, Barbara C, Tanya J Shaw, and Jean-François Ethier. "Animal Models of Ovarian Cancer." *Reproductive Biology and Endocrinology : RB&E* 1 (October 7, 2003): 67.
320. Vasama-Neuvonen, K., E. Pukkala, H. Paakkulainen, P. Mutanen, E. Weiderpass, P. Boffetta, N. Shen, T. Kauppinen, H. Vainio, and T. Partanen. "Ovarian Cancer and Occupational Exposures in Finland." *American Journal of Industrial Medicine* 36, no. 1 (July 1999): 83–89.
321. Venkatesan, Priya. "Possible X Chromosome-Linked Transmission of Ovarian Cancer." *The Lancet. Oncology* 19, no. 4 (April 2018): e185. [https://doi.org/10.1016/S1470-2045\(18\)30183-9](https://doi.org/10.1016/S1470-2045(18)30183-9).
322. Venter, P. F., and M. Iturralde. "Migration of a Particulate Radioactive Tracer from the Vagina to the Peritoneal Cavity and Ovaries." *South African Medical Journal = Suid-Afrikaanse Tydskrif Vir Geneeskunde* 55, no. 23 (June 2, 1979): 917–19.
323. Verdoodt, Freija, Christian Dehlendorff, Søren Friis, and Susanne K. Kjaer. "Non-Aspirin NSAID Use and Ovarian Cancer Mortality." *Gynecologic Oncology* 150, no. 2 (2018): 331–37.
324. Vicus, Danielle, Amy Finch, Barry Rosen, Isabel Fan, Linda Bradley, Ilana Cass, Ping Sun, et al. "Risk Factors for Carcinoma of the Fallopian Tube in Women with and without a Germline BRCA Mutation." *Gynecologic Oncology* 118, no. 2 (August 1, 2010): 155–59.
325. Vineis, Paolo, Phyllis Illari, and Federica Russo. "Causality in Cancer Research: A Journey through Models in Molecular Epidemiology and Their Philosophical Interpretation." *Emerging Themes in Epidemiology* 14, no. 7 (2017).
326. Virta, RL. "The Phase Relationship of Talc and Amphiboles in a Fibrous Talc Sample." IH; Report of Investigations, 1985. <https://www.cdc.gov/niosh/nioshtic-2/10004328.html>.
327. Vitonis, Allison F., Linda Titus-Ernstoff, and Daniel W. Cramer. "Assessing Ovarian Cancer Risk When Considering Elective Oophorectomy at the Time of Hysterectomy." *Obstetrics and Gynecology* 117, no. 5 (May 2011): 1042–50.
328. Vosnakis, Kelly, Elizabeth Perry, Karen Madsen, and Lisa Bradley. "Background Versus Risk-Based Screening Levels - An Examination Of Arsenic Background Soil Concentrations In Seven States." *Proceedings of the Annual International Conference on Soils, Sediments, Water and Energy* 14, no. 1 (January 26, 2010).
329. Wang, Xiaorong, Sihao Lin, Ignatius Yu, Hong Qiu, Yajia Lan, and Eiji Yano. "Cause-Specific Mortality in a Chinese Chrysotile Textile Worker Cohort." *Cancer Science* 104, no. 2 (February 2013): 245–49. <https://doi.org/10.1111/cas.12060>.

Daniel Clarke-Pearson, M.D.

Materials Considered

330. Wang, Chunpeng, Zhenzhen Liang, Xin Liu, Qian Zhang, and Shuang Li. "The Association between Endometriosis, Tubal Ligation, Hysterectomy and Epithelial Ovarian Cancer: Meta-Analyses." *International Journal of Environmental Research and Public Health* 13, no. 11 (November 14, 2016): 1138.
331. Wehner, A.P. "Biological Effects of Cosmetic Talc." *Fd Chem. Toxic* 32, no. 12 (1994): 1173-84.
332. Wehner, A. P., A. S. Hall, R. E. Weller, E. A. Lepel, and R. E. Schirmer. "Do Particles Translocate from the Vagina to the Oviducts and Beyond?" *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 23, no. 3 (March 1985): 367-72.
333. Wehner, A. P., R. E. Weller, and E. A. Lepel. "On Talc Translocation from the Vagina to the Oviducts and Beyond." *Food and Chemical Toxicology: An International Journal Published for the British Industrial Biological Research Association* 24, no. 4 (April 1986): 329-38.
334. Weiss, W. "Cigarette Smoking and Lung Cancer Trends. A Light at the End of the Tunnel?" *Chest* 111, no. 5 (May 1997): 1414-16.
335. Wentzensen, Nicolas, Elizabeth M. Poole, Britton Trabert, Emily White, Alan A. Arslan, Alpa V. Patel, V. Wendy Setiawan, et al. "Ovarian Cancer Risk Factors by Histologic Subtype: An Analysis From the Ovarian Cancer Cohort Consortium." *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology* 34, no. 24 (20 2016): 2888-98.
336. Werner, I. "Presence of Asbestos in Talc Samples." *Atenschutzinform* 21, no. 5 (1982).
337. Whiteman, David C., Michael F. G. Murphy, Linda S. Cook, Daniel W. Cramer, Patricia Hartge, Polly A. Marchbanks, Philip C. Nasca, Roberta B. Ness, David M. Purdie, and Harvey A. Risch. "Multiple Births and Risk of Epithelial Ovarian Cancer." *Journal of the National Cancer Institute* 92, no. 14 (July 19, 2000): 1172-77.
338. Whittemore, A. S., R. Harris, and J. Itnyre. "Characteristics Relating to Ovarian Cancer Risk: Collaborative Analysis of 12 US Case-Control Studies. IV. The Pathogenesis of Epithelial Ovarian Cancer. Collaborative Ovarian Cancer Group." *American Journal of Epidemiology* 136, no. 10 (November 15, 1992): 1212-20.
339. Whittemore, A. S., M. L. Wu, R. S. Paffenbarger, D. L. Sarles, J. B. Kampert, S. Grosser, D. L. Jung, S. Ballon, and M. Hendrickson. "Personal and Environmental Characteristics Related to Epithelial Ovarian Cancer. II. Exposures to Talcum Powder, Tobacco, Alcohol, and Coffee." *American Journal of Epidemiology* 128, no. 6 (December 1988): 1228-40.
340. Whysner, J., and M. Mohan. "Perineal Application of Talc and Cornstarch Powders: Evaluation of Ovarian Cancer Risk." *American Journal of Obstetrics and Gynecology* 182, no. 3 (March 2000): 720-24.
341. Wignall, B.K., and A.J. Fox. "Mortality of Female Gas Mask Assemblers." *British Journal of Industrial Medicine* 39, no. 1 (1982): 34-38.
342. Wild, P. "Lung Cancer Risk and Talc Not Containing Asbestiform Fibres: A Review of the Epidemiological Evidence." *Occupational and Environmental Medicine* 63, no. 1 (January 2006): 4-9. <https://doi.org/10.1136/oem.2005.020750>.
343. Wolff, Henrik, Tapio Vehmas, Panu Oksa, Jorma Rantanen, and Harri Vainio. "Asbestos, Asbestosis, and Cancer, the Helsinki Criteria for Diagnosis and Attribution 2014: Recommendations." *Scandinavian Journal of Work, Environment & Health* 41, no. 1 (January 2015): 5-15.
344. Wong, C., R. E. Hempling, M. S. Piver, N. Natarajan, and C. J. Mettlin. "Perineal Talc Exposure and Subsequent Epithelial Ovarian Cancer: A Case-Control Study." *Obstetrics and Gynecology* 93, no. 3 (March 1999): 372-76.

Daniel Clarke-Pearson, M.D.

Materials Considered

345. Woodruff, J. D. "The Pathogenesis of Ovarian Neoplasia." *The Johns Hopkins Medical Journal* 144, no. 4 (April 1979): 117–20.
346. Wright, H. R., J. C. Wheeler, J. A. Woods, J. Hesford, P. Taylor, and R. F. Edlich. "Potential Toxicity of Retrograde Uterine Passage of Particulate Matter." *Journal of Long-Term Effects of Medical Implants* 6, no. 3–4 (1996): 199–206.
347. Wright, Jason D. "What is New in Ovarian Cancer?" *Obstet Gynecol* 132 (2018): 1498–99.
348. Wu, Anna H., Celeste L. Pearce, Chiu-Chen Tseng, and Malcolm C. Pike. "African Americans and Hispanics Remain at Lower Risk of Ovarian Cancer Than Non-Hispanic Whites after Considering Nongenetic Risk Factors and Oophorectomy Rates." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 24, no. 7 (July 2015): 1094–1100.
349. Wu, Anna H., Celeste L. Pearce, Chiu-Chen Tseng, Claire Templeman, and Malcolm C. Pike. "Markers of Inflammation and Risk of Ovarian Cancer in Los Angeles County." *International Journal of Cancer. Journal International Du Cancer* 124, no. 6 (March 15, 2009): 1409–15.
350. Wu, Song, Wei Zhu, Patricia Thompson, and Yusuf A. Hannun. "Evaluating Intrinsic and Non-Intrinsic Cancer Risk Factors." *Nature Communications* 9, no. 1 (August 28, 2018): 3490.
351. "You Can Steer Clients to Condoms Free from Potentially Harmful Talc: Condom Companies Agree to Produce without the Dry Lubricant." *Contraceptive Technology Update* 16, no. 11 (November 1995): 133–44.
352. Zazenski, R., W. H. Ashton, D. Briggs, M. Chudkowski, J. W. Kelse, L. MacEachern, E. F. McCarthy, M. A. Nordhauser, M. T. Roddy, and N. M. Teetsel. "Talc: Occurrence, Characterization, and Consumer Applications." *Regulatory Toxicology and Pharmacology: RTP* 21, no. 2 (April 1995): 218–29.
353. Zervomanoklakis, I, H.W. Ott, D Hadziomerovic, V. Mattle, B.E. Seeber, I. Virgolini, D. Heute, S. Kissler, G. Leyendecker, and L. Wildt. "Physiology of Upward Transport in the Human Female Genital Tract." *Annals of New York Academy of Sciences* 1101, no. 1 (2007): 1–20.
354. Zhao, Weixing, Justin B. Steinfeld, Fengshan Liang, Xiaoyong Chen, David G. Maranon, Chu Jian Ma, Youngho Kwon, et al. "BRCA1-BARD1 Promotes RAD51-Mediated Homologous DNA Pairing." *Nature* 550, no. 7676 (19 2017): 360–65.
355. American Board of Obstetrics and Gynecology, Inc. (ABOG), "Guide to Learning in Gynecologic Oncology." Revised 4/2018.
356. AMA Analytical Services, Inc. - Certificate of Analysis - Job Name: Task 3 - Analysis of Official Samples; Job Number: CLIN 1 - Task 3 (Oct. 11, 2019).
357. Analysis report MAS Project #14-1683 dated April 28, 2017 prepared by William Longo, Mark Rigler of the Materials Analytical Services (MAS) laboratory.
358. Analysis of Johnson & Johnson Baby Powder & Valiant Shower to Shower Talc Products for Amphibole (Tremolite) Asbestos, Expert Report, William Longo and Mark Rigler of the Materials Analytical Services (MAS), August 2, 2017.
359. Bureau Veritas Letter re: Johnson's Baby Powder Finished Goods Lot #22318RB (Protocol INV-106924-002) Bureau Veritas Reference: A1910246 (Preliminary Update/Results)
360. Campion, Alan, Kenneth J. Smith, Alexey V. Fedulov, David Gregory, Yuwei Fan and John J. Godleski. "Identification of Foreign Particles in Human Tissue using Raman Microscopy." *Anal Chem* (2018).
361. Cralley, L. J., M. M. Key, D. H. Groth, W. S. Lainhart, and R. M. Ligo. "Fibrous and Mineral Content of Cosmetic Talcum Products." *American Industrial Hygiene Association Journal* 29, no. 4 (August 1968): 350–54.

Daniel Clarke-Pearson, M.D.

Materials Considered

362. Daubert Order and Opinion, MDL No. 2738.
363. Deposition of Alice M. Blount, Ph.D., April 13, 2018. Gail Lucille Ingham, et al., v. Johnson & Johnson, et al. Case No. 1522-CC10417
364. FDA Executive Summary "Preliminary Recommendations on Testing Methods for Asbestos in Talc and Consumer Products Containing Talc"
365. FDA News Release - Baby powder manufacturer voluntarily recalls products for asbestos.
366. Fletcher, N.M., Amy K. Harper, Ira Memaj, Rong Fan, Robert T. Morris, and Ghassan M. Saed. "Molecular Basis Supporting the Association of Talcum Powder Use with Increased Risk of Ovarian Cancer." *Reproductive Sciences* 1-10 (2019).
367. Fortner, et al. (2019) Ovarian cancer risk factors by tumor aggressiveness: an analysis from the Ovarian Cancer Cohort Consortium.
368. Gabriel, et al. (2019) Douching, talc use and risk for ovarian cancer and conditions related to genital tract inflammation.
369. Gossett, del Carmen. Use of powder in the genital area and ovarian cancer risk: examining the evidence; *JAMA*, 2020;323(1):29-31.
370. Harlow, B. L., and N. S. Weiss. 1989. "A Case-Control Study of Borderline Ovarian Tumors: The Influence of Perineal Exposure to Talc." *American Journal of Epidemiology* 130 (2): 390–94.
371. Harper, Amy K, and Ghassan Saed. "Talc Induces a pro-Oxidant State in Normal and Ovarian Cancer Cells through Genetic Point Mutations in Key Redox Enzymes," Accepted for Presentation at SGO Meeting." In Press 2019.
372. Harper and Saed, SGO poster presentation annual meeting 2018 (Exhibit PSC\_Saed 3).
373. Harrington, et al. (2019) New Guidelines for Statistical Reporting in the Journal, *The New England Journal of Medicine*.
374. Health Canada Poster.
375. Health Canada, "Draft Screening Assessment", Chemical Abstracts Service Registry Number 14807-96-6 (December 2018).
376. IARC Monographs on the Identification of Carcinogenic Hazards to Humans "Report of the Advisory Group to Recommend Priorities for the IARC Monographs during 2020-2024".
377. Institute of Medicine (IOM) Committee on the State of Science in Ovarian Cancer Research. *Ovarian Cancers: Evolving Paradigms in Research and Care*. The National Academies of Sciences, Engineering and Medicine. Washington (DC): National Academies Press (US), 2016.
378. Johnson & Johnson Consumer Inc. to Voluntarily Recall a Single Lot of Johnson's Baby Powder in the United States.
379. La Vecchia. (2017) Ovarian Cancer: Epidemiology and Risk Factors. *European Journal of Cancer Prevention* 2017, 26:55–62.
380. Lheureux, Gourley, Vergote, Oza. Epithelial Ovarian Cancer. *Lancet* 2019; 393: 1240–53.
381. Lloyd, Jillian, Naomi S. Crouch, Catherine L. Minto, Lih-Mei Liao, Sarah M. Creighton. "Female Genital Appearance: 'Normality' Unfolds." *BJOG: an International Journal of Obstetrics and Gynaecology* 112 (May 2005): 643-46.
382. Longo, William E. and Mark W. Rigler. "The Analysis of Johnson & Johnson's Historical Product Containers and Imerys' Historical Railroad Car Samples from the 1960's to the Early 2000's for Amphibole Asbestos", Supplemental Report, January 15, 2019.

Daniel Clarke-Pearson, M.D.

Materials Considered

383. Longo, William E., and Mark W. Rigler. "The Analysis of Johnson & Johnson's Historical Product Containers and Imerys' Historical Railroad Car Samples from the 1960's to the Early 2,000's for Amphibole Asbestos," 2nd Supplemental Report dated February 1, 2019.
384. Mandarino et al. The effect of talc particles on phagocytes in co-culture with ovarian cancer cells, *Environmental Research*, 2020;180:108676.
385. MAS Project 14-1852, Below the Waist Application of Johnson & Johnson Baby Powder, William Longo, Mark Rigler, and William Egeland of Materials Analytical Services (MAS), September 2017.
386. McDonald et al. Five case studies with correlative light and scanning electron microscopy, *Am J Clin Pathol*, 2019;XX:1-18.
387. McDonald, et al. (2019) Correlative polarizing light and scanning electron microscopy for the assessment of talc in pelvic region lymph nodes.
388. McDonald, et al. (2019) Magnesium/silicon atomic weight percent ratio standards for the tissue identification of talc by scanning electron microscopy and energy dispersive X-ray analysis.
389. McDonald, et al. (2019) Migration of talc from the perineum to multiple pelvic organ sites.
390. Mossman, Brooke T. "Mechanistic in vitro studies: What They Have Told Us About Carcinogenic Properties of Elongated Mineral Particles (EMPs)." *Toxicology and Applied Pharmacology* 361 (2018): 62-67.
391. Mossman, Brooke T., et al. "New Insights into Understanding the Mechanisms, Pathogenesis, and Management of Malignant Mesotheliomas." *The American Journal of Pathology* 182, no. 4 (April 2013): 1065-77.
392. NCI - Ovarian, Fallopian Tube, and Primary Peritoneal Cancer Prevention (PDQ) - Health Professional Version.
393. O'Brien et al. Association of powder use in the genital area with risk of ovarian cancer-supplementary online content.
394. O'Brien et al. Association of powder use in the genital area with risk of ovarian cancer; *JAMA*, 2020;323(1):49-59.
395. O'Brien et al. Genital powder use and risk of ovarian cancer: a pooled analysis - ASPO Abstracts.
396. O'Brien et al. Perineal talc use, douching, and the risk of uterine cancer. *Epidemiology* 2019;30: 845-852.
397. O'Brien and colleagues. Genital Powder Use and Ovarian Cancer Letters to the Editor. *JAMA* May 26, 2020. Vol. 323, Number 20; 2095-2097.
398. RJ Lee Letter and Report re: Analysis of Submitted talc samples RJ Lee Group Project Number TLH910472.
399. RJ Lee Letter and Report re: Incidence Report, RJ Lee Group Project Number TLH910472.
400. RJ Lee Letter and Report re: INV-106924-003, RJ Lee Group Project Number TLH910477.
401. Rothman. Six Persistent Research Misconceptions.
402. Savant, S., Shruthi Sriramkumar and Heather M. O'Hagan. "The Role of Inflammation and Inflammatory Mediators in the Development, Progression, Metastasis, and Chemoresistance of Epithelial Ovarian Cancer."
403. Smith-Bindman R, Poder L, Johnson E, Miglioretti DL. Risk of Malignant Ovarian Cancer Based on Ultrasonography Findings in a Large Unselected Population. *JAMA Intern Med*. 2019 Jan 01; 179(1):71-77.
404. Steffen et al. Serous Ovarian Cancer caused by exposure to asbestos and fibrous talc in cosmetic talc powders - a case series, *JOEM*, 2020; 62(2):e65-e77.
405. Steiling, W., J. F. Almeida, H. Assaf Vandecasteele, S. Gilpin, T. Kawamoto, L. O'Keeffe, G.

Daniel Clarke-Pearson, M.D.

Materials Considered

- Pappa, K. Rettinger, H. Rothe, and A. M. Bowden. "Principles for the Safety Evaluation of Cosmetic Powders." *Toxicology Letters*, August 17, 2018.
406. Taher, et al, Systematic Review and Meta-Analysis of the Association Between Perineal Use of Talc and Risk of Ovarian Cancer (2019).
407. TEM Analysis of Historical 1978 Johnson's Baby Powder Sample of Amphibole Asbestos, Expert Report, William Longo and Mark Rigler of Materials Analytical Services (MAS) laboratory, February 16, 2018.
408. Testimony of Annie Awanais Yessian, M.D., Eva Echeverria, et al. v. Johnson & Johnson, et al. Case No. BC628228, July 13, 2017.
409. Testimony of Warer K. Huh, M.D., Gail Lucille Ingham, et al., v. Johnson & Johnson, et al., Cause No. 1522-CC10417-01, July 5, 2018.
410. Trabert, Britton, et al. "Aspirin, Nonaspirin Nonsteroidal Anti-Inflammatory Drug, and Acetaminophen Use and Risk of Invasive Epithelial Ovarian Cancer: A Pooled Analysis in the Ovarian Cancer Association Consortium." *JNCI: Jour Natl Cancer Inst* no. 106, no. 2 (May 31, 2018).
411. Vitonis et al. (2011) Assessing ovarian cancer risk when considering elective oophorectomy at the time of hysterectomy. *Obstet Gynecol* 2011;117:1042–50.
412. Wright, Jason D. "What is New in Ovarian Cancer?" *Obstet Gynecol* 132 (2018): 1498-99.
413. Wu, Song, Wei Zhu, Patricia Thompson, and Yusuf A. Hannun. "Evaluating Intrinsic and Non-Intrinsic Cancer Risk Factors." *Nature Communications* 9, no. 1 (August 28, 2018): 3490.
414. Bird, Tess, et al. (2021) A Review of the Talc Industry's Influence on Federal Regulation and Scientific Standards for Asbestos in Talc. *Journal of Environmental and Occupational Health Policy* 0(0) 1–18.
415. Cramer, Daniel, et al. Factors Affecting the Association of Oral Contraceptives and Ovarian Cancer. *N Engl J Med*. 1982;307:1047-51.
416. Dyer, Owen. Johnson & Johnson Recalls its Baby Powder after FDA Finds Asbestos in Sample. *BMJ* 2019;367I6118.
417. Emi, T. Transcriptomic and Epigenomic Effects of Insoluble Particles on J774 Macrophages. *Epigenetics* 2021; Vol. 16, No. 10, 1053-1070.
418. Exponent. Toxic Talc? Anatomy of a Talc Defense powerpoint presentation presented by John DeSesso. January 18, 2018.
419. The Facts on Talcum Powder Safety. [www.factsabouttalc.com](http://www.factsabouttalc.com)
420. Fitzgerald Analysis of Johnson & Johnson Baby Powder 1 and 2. Scientific Analytical Institute laboratory.
421. Gurowitz, Margaret. The Birth of Our Baby Products. Chapter 21. April 30, 2007.
422. Health Canada Screening Assessment Talc (P1.00000272.0001. April 2021.
423. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Man: Volume 2," 1973. Some Inorganic and Organometallic Compounds.
424. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Man: Volume 14," 1977. Asbestos.
425. IARC. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 101," 2013. Some Chemicals Present in Industrial and Consumer Products, Food and Drinking-Water.
426. Manichaikul, Ani, et al. Identification of Novel Epithelial Ovarian Cancer Loci in Women of African Ancestry. *Int J Cancer*. 2020 June 01; 146(11): 2987–2998.
427. MVA Scientific Consultants Laboratory. Investigation of Italian Talc Samples for Asbestos. August 1, 2017.
428. USEPA Prioritized Chronic-Dose Response Values. 2014

Daniel Clarke-Pearson, M.D.

Materials Considered

429. Yachida, Nozomi, et al. How Does Endometriosis Lead to Ovarian Cancer? The Molecular Mechanism of Endometriosis-Associated Ovarian Cancer Development. *Cancers* 2021, 13, 1439.
430. Williams, Kristina, et al. "Prognostic Significance and Predictors of the Neutrophil-to-Lymphocyte Ratio in Ovarian Cancer." *Gynecol Oncol.* 2014 March ; 132(3): 542–550.
431. Ingham SL, Warwick J, Buchan I, et al. Ovarian cancer among 8,005 women from a breast cancer family history clinic: no increased risk of invasive ovarian cancer in families testing negative for BRCA1 and BRCA2. *J Med Genet* 2013; 50:368.
432. King MC, Walsh T. Testing Ashkenazi Jewish Women for Mutations Predisposing to Breast Cancer in Genes Other Than BRCA1 and BRCA2-Reply. *JAMA Oncol* 2018; 4:1012.
433. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Breast cancer screening and diagnosis. Version 1.2020.  
[http://www.nccn.org/professionals/physician\\_gls/f\\_guidelines.asp](http://www.nccn.org/professionals/physician_gls/f_guidelines.asp) (Accessed on November 11, 2020).
434. Nelson HD, Pappas M, Cantor A, et al. Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer in Women: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA* 2019; 322:666.
435. Peshkin and Isaacs, Genetic testing and management of individuals at risk of hereditary breast and ovarian cancer syndromes, UpToDate April 2021.
436. Struwing JP, Hartge P, Wacholder S, et al. The risk of cancer associated with specific mutations of BRCA1 and BRCA2 among Ashkenazi Jews. *N Engl J Med* 1997; 336:1401.
437. US Preventive Services Task Force, Owens DK, Davidson KW, et al. Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA* 2019; 322:652.
438. Walsh T, Mandell JB, Norquist BM, et al. Genetic Predisposition to Breast Cancer Due to Mutations Other Than BRCA1 and BRCA2 Founder Alleles Among Ashkenazi Jewish Women. *JAMA Oncol* 2017; 3:1647.
439. Goodman, J., et al. A Critical Review of Talc and Ovarian Cancer. *J Toxicol Environ Health, Part B* 2020; 23(5):185-213.
440. Childers, CP et al. National Estimates of Genetic Testing in Women with a History of Breast or Ovarian Cancer. *Journal of Clinical Oncology*, 2017 Dec. 1; 35 (34)3800-3806.
441. Compton, SA et al. Ring shaped RAD51 Paralog Protein Complexes Bind Holliday Junctions and Replication Forks as Visualized by Electron Microscopy. *The Journal of Biological Chemistry* 2010; 285:13349.
442. Curia, Maria Cristina et al. MUTYH: Not just polyposis. *World Journal of Clinical Oncology* vol. 11,7 (2020): 428-449.
443. Davis, Colette et al. Genital powder use and risk of epithelial ovarian cancer in the Ovarian Cancer in Women of African Ancestry Consortium. *Cancer Epidemiol Biomarkers Prev.* 2021.
444. Dominguez-Valentin, M et al. Cancer risks by gene, age, and gender in 6350 carriers of pathogenic mismatch repair variants: findings from the Prospective Lynch Syndrome Database. *Genetics in Med* 2020; 22:15.
445. Ewald, Ingrid et al. Genomic rearrangements in BRCA1 and BRCA2: A literature review. *Genetics and Molecular Biology*, 32, 3, (2009) 437-446.
446. Fanale D, Fiorino A, Incorvaia L, et al. Prevalence and Spectrum of Germline BRCA1 and BRCA2 Variants of Uncertain Significance in Breast/Ovarian Cancer: Mysterious Signals from the Genome. *Front Oncol.* 2021;11:682445.
447. Federici, Giulia, Variants of uncertain significance in the era of high-throughput genome sequencing: a lesson from breast and ovary cancers. *Journal of Experimental & Clinical Cancer*

Daniel Clarke-Pearson, M.D.  
Materials Considered

Research 2020; 39:46.

448. Frank, TS et al. Clinical characteristics of individuals with germline mutations in BRCA1 and BRCA2. *J Clin Oncol* 2002; 20:1480.
449. Frey MK, Kim SH, Bassett RY, Martineau J, Dalton E, Chern JY, Blank SV. Rescreening for genetic mutations using multi-gene panel testing in patients who previously underwent non-informative genetic screening. *Gynecol Oncol.* 2015 Nov;139(2):211-5.
450. Garcia-de-Teresa et al. Chromosome Instability in Fanconi Anemia: From Breaks to Phenotypic Consequences. *GENES* 2020; 11:1528.
451. Gene-Disease Validity Classification Summary, MUTYH - familial ovarian cancer, Clinical Genome Resource. URL [08.22.2021]
452. George, Sophia et al. Proliferation in the Normal FTE Is a Hallmark of the Follicular Phase, Not BRCA Mutation Status. *Clinical Cancer Research* 2012.
453. Greaves, M. How many mutations does it take? The Darwin Cancer Blog, *BMJ* 10/26/2015
454. Hall JM, Lee MK, Morrow J, Newman B, Anderson LA, Huey B, King M-C. Linkage of early-onset familial breast cancer to chromosome 17q21. *Science* 1990; 250:1684-1689.
455. Han E, Yoo J, Chae H, Lee S, Kim DH, Kim KJ, Kim Y, Kim M. Detection of BRCA1/2 large genomic rearrangement including BRCA1 promoter-region deletions using next-generation sequencing. *Clin Chim Acta.* 2020 Jun;505:49-54.
456. Heather, JM and Chain, B. The sequence of sequencers: The history of sequencing DNA. *Genomics* 2016; 107:1.
457. Hodan et al. Prevalence of Lynch Syndrome in women with mismatch repair-deficient ovarian cancer. *Cancer Med* 2021; 10:1012.
458. Hutchcraft, Megan L et al. MUTYH as an Emerging Predictive Biomarker in Ovarian Cancer. *Diagnostics (Basel, Switzerland)* vol. 11,1 84. 6 Jan. 2021.
459. Jackson, Sarah et al. Characteristics of Individuals With Breast Cancer Rearrangements in BRCA1 and BRCA2. *Cancer* 2014 May 15; 120(10): 1557-1564.
460. Knudson,AG. Mutation and cancer: a statistical study of retinoblastoma. *PNAS USA* 1971;98:820.
461. Konstantinopoulos PA, Norquist B, Lacchetti C, Armstrong D, Grisham RN, Goodfellow PJ, Kohn EC, Levine DA, Liu JF, Lu KH, Sparacio D, Annunziata CM. Germline and Somatic Tumor Testing in Epithelial Ovarian Cancer: ASCO Guideline. *J Clin Oncol.* 2020 Apr 10;38(11):1222-1245.
462. Kuchenbaecker KB, et al. Risks of Breast, Ovarian, and Contralateral Breast Cancer for BRCA1 and BRCA2 Mutation Carriers. *JAMA* 2017 Jun 20;317(23):2402-2416.
463. Lee, Kristy et al. Clinical Validity Assessment of Genes Frequently Tested on Hereditary Breast and Ovarian Cancer Susceptibility Sequencing Panels. *Genet Med.* 2019 July ; 21(7): 1497–1506.
464. Lewis, Ricki “What’s a “Variant of Uncertain Significance?” A VUS?“ <https://dnascience.plos.org/2018/05/03/whats-a-variant-of-uncertain-significance-a-vus/>
465. Lincoln, S. A Systematic Comparison of Traditional and Multigene Panel Testing for Hereditary Breast and Ovarian Cancer Genes in More Than 1000 Patients. *J Mol Diagn* 2015, 17: 533-544
466. Lu, KH and Daniels, MC, Endometrial and Ovarian Cancer in Women with Lynch Syndrome: Update on Screening and Prevention. *Fam Cancer* 2013; 12:273.
467. Martincorena, et al. Universal Patterns of Selection in Cancer and Somatic Tissues. *Cell* 2017;171:1029 .
468. Morjaria, S. Driver mutations in Oncogenesis. *International J of Molecular and Immunooncology* 2020; 6:100
469. Nielsen, F., van Overeem Hansen, T. & Sorensen, C. Hereditary breast and ovarian cancer: new

Daniel Clarke-Pearson, M.D.

Materials Considered

- genes in confined pathways. *Nat Rev Cancer* 16, 599–612 (2016).
470. Piombino et al. Secondary Prevention in Hereditary Breast and/or Ovarian Cancer Syndromes Other than BRCA. *J Oncol* 2020:6384190.
471. Plon, SE et al. Sequence variant classification and reporting: recommendations for improving the interpretation of cancer susceptibility genetic tests results. *Hum Mutat* 2008;29:1282.
472. Richards, Sue et al. Standards and guidelines for the interpretation of sequence variants: a joint consensus recommendation of the American College of Medical Genetics and Genomics and the Association for Molecular Pathology. *Genetics in medicine : official journal of the American College of Medical Genetics* vol. 17,5 (2015): 405-24.
473. Schorge, John O et al. SGO White Paper on ovarian cancer: etiology, screening and surveillance. *Gynecologic oncology*. 2010; vol. 119,1: 7-17.
474. Terdiman, Jonathan P. MYH-associated disease: attenuated adenomatous polyposis of the colon is only part of the story.” *Gastroenterology* vol. 137,6 (2009): 1883-6.
475. Verma M, Kulshrestha S, Puri A. Genome Sequencing. *Methods Mol Biol*. 2017;1525:3-33.
476. Vogt, Stefanie et al. Expanded extracolonic tumor spectrum in MUTYH-associated polyposis. *Gastroenterology* vol. 137,6 (2009): 1976-85.e1-10.
477. Wallace, AJ. New challenges for BRCA testing: a view from the diagnostic laboratory. *Eur J Hum Genet* 2016; 24:S10.
478. Wentzensen, Nicolas, O'Brien, Katie M. Talc, body powder, and ovarian cancer: A summary of the epidemiologic evidence. *Gynecologic Oncology* 2021,ISSN0090-8258
479. Wilson, M K et al. Fifth Ovarian Cancer Consensus Conference of the Gynecologic Cancer InterGroup: recurrent disease. *Annals of oncology : official journal of the European Society for Medical Oncology* 2017; vol. 28,4: 727-732.
480. Win, Aung Ko et al. Risk of extracolonic cancers for people with biallelic and monoallelic mutations in MUTYH. *Int J Cancer*. 2016 October 1; 139(7): 1557–1563.
481. Wooster, R et al. Identification of breast cancer susceptibility gene BRCA2. *Nature* 1994;378:789.
482. Wright, Maya A et al. Douching or Perineal Talc Use and Prevalent Fibroids in Young African American Women. *Journal of women's health* 5 Mar. 2021
483. Yang, X et al. Ovarian and Breast Cancer Risks Associated with Pathogenic Variants in RAD51C and RAD51D. *JCNI* 2020; 112.
484. Peres, Lauren, et al. Racial Differences in Population Attributable Risk for Epithelial Ovarian Cancer in the OCWAA Consortium. *JCNI* 2021; 113(6): djaa188.
485. Alvi, Q et al. Demographic, Lifestyle and Reproductive Factors Associated with Ovarian Cancer Among Married Women in Pakistan. *Journal of Namibian Studies*. 35 (2023): 2029-2041.
486. Ambarak, Mariam Farag. Discovering of Asbestos Fibers and Corn Starch in Talc Material for Baby Powder Samples from Different Markets in Benghazi City. *Ad J Chem B* 2023. 5(3): 261-270.
487. American Cancer Society. “Talcum Powder and Cancer.” Statement, December 6, 2022.
488. APHA. “Eliminating Exposure to Asbestos.” Statement, November 5, 2019.
489. Borm, Paul J.A. Talc Inhalation in Rats and Humans. *JOEM* February 2023. 65(2): 152-159.
490. Brieger, K et al. High Pre-Diagnosis Inflammation-Related Risk Score Associated with Decreased Ovarian Cancer Survival. *Cancer Epidemiol Biomarkers Prev*. 2022 February; 31(2): 443-452.
491. Brieger, K et al. High Pre-Diagnosis Inflammation-Related Risk Score Associated with Decreased Ovarian Cancer Survival. Supplemental 1 Tables. 2022.
492. Brieger, K et al. High Pre-Diagnosis Inflammation-Related Risk Score Associated with Decreased Ovarian Cancer Survival. Supplemental 2 Table. 2022.
493. Ciocan, C et al. Mortality in the Cohort of Talc Miners and Millers from Val Chisone, Northern Italy: 74 Years of Follow Up. *Environmental Research* 203 (2022): 111865.

Daniel Clarke-Pearson, M.D.

Materials Considered

494. Cramer, Daniel. The Association of Talc Use and Ovarian Cancer: Biased or Causal Letter to the Editor. *Gynecologic Oncology Reports* 41 (2022).
495. Davis, C et al. Genital Powder Use and Risk of Epithelial Ovarian Cancer in the Ovarian Cancer in Women of African Ancestry Consortium. *Cancer Epidemiol Biomarkers Prev.* 2021; 30: 1660-8.
496. Ding, D et al. Insights into the Role of Oxidative Stress in Ovarian Cancer. *Oxidative Medicine and Cellular Longevity* Vol. 2021. <https://doi.org/10.1155/2021/8388258>.
497. Federal Register. Asbestos; Reporting and Recordkeeping Requirements Under the Toxic Substances Control Act (TSCA). A Final Rule by the EPA on July 25, 2023.
498. Ferrante, D et al. Italian Pool of Asbestos Workers Cohorts: Mortality Trends of Asbestos-Related Neoplasms after Long Time since First Exposure. *Occup Environ Med* 2017; 74: 887-898.
499. Goodman, J et al. A Critical Review of Talc and Ovarian Cancer. *Journal of Toxicology and Environmental Health, Part B* 2020; 23:5, 183-213.
500. Gossett, D and del Carmen, M. Use of Powder in the Genital Area and Ovarian Cancer Risk Letter to the Editor. *JAMA* January 7, 2020. Volume 323, Number 1.
501. Henley, S et al. Geographic Co-Occurrence of Mesothelioma and Ovarian Cancer Incidence. *J Womens Health* January 2020; 29(1): 111-118.
502. Huang, T et al. Estimated Number of Lifetime Ovulatory Years and Its Determinants in Relation to Levels of Circulating Inflammatory Biomarkers. *Am J Epidemiol* 2020; 189(7): 660-670.
503. Hurwitz, L et al. Modification of the Association Between Frequent Aspirin Use and Ovarian Cancer Risk: A Meta-Analysis Using Individual-Level Data From Two Ovarian Cancer Consortia. *J Clin Oncol* 2022.
504. Leung, L et al. Occupational Environment and Ovarian Cancer Risk. *Occup Environ Med* 2023; 0:1-9.
505. Lynch, H et al. Systematic Review of the Association Between Talc and Female Reproductive Tract Cancers. *Frontiers in Toxicology* August 7, 2023.
506. Lynch, H et al. Systematic Review of the Association Between Talc and Female Reproductive Tract Cancers. *Frontiers in Toxicology*. Supplemental Online Content.
507. Micha J et al. Talc Powder and Ovarian Cancer: What is the Evidence? *Arch Gynecol Obstet* 2022; 306: 931-933.
508. National Cancer Institute. Asbestos – Cancer-Causing Substances. March 29, 2022.
509. National Cancer Institute. Ovarian, Fallopian Tube, and Primary Peritoneal Cancers Prevention (PDQ) Health Professional Version. October 16, 2023.
510. Nowak, D et al. Asbestos Exposure and Ovarian Cancer - a Gynecological Occupational Disease. Background, Mandatory Notification, Practical Approach. *Geburtshilfe Frauenheilkd* 2021 May; 81(5): 555-561.
511. O'Brien, K et al. Douching and Genital Talc Use: Patterns of Use and Reliability of Self-Reported Exposure Manuscript.
512. Johnson & Johnson's Baby Powder: A Comprehensive Review (in Response to Health Canada). March 17, 2020.
513. Pal, T et al. BRCA1 and BRCA2 Mutations Account for a Large Proportion of Ovarian Carcinoma Cases. *Cancer* December 15, 2005; 104(12): 2807-16.
514. Permuth-Wey, J et al. Epidemiology of Ovarian Cancer: An Update. *Advances in Diagnosis and Management of Ovarian Cancer*. 2014.
515. Phung, M et al. Effects of Risk Factors for Ovarian Cancer in Women With and Without Endometriosis. *Fertil and Steril* 2022.
516. Phung, M et al. Effects of Risk Factors for Ovarian Cancer in Women With and Without

Daniel Clarke-Pearson, M.D.  
Materials Considered

Endometriosis. Supplemental Content Online.

517. Santosh, S et al. "Oxidative Stress in the Pathogenesis of Ovarian Cancer." Handbook of Oxidative Stress in Cancer: Therapeutic Aspects. 2022. [https://doi.org/10.1007/978-981-16-5422-0\\_226](https://doi.org/10.1007/978-981-16-5422-0_226)
518. Schildkraut, J. Invited Commentary: Relationship Between Ovulation and Markers of Systemic Inflammation Versus Markers of Localized Inflammation. *Am J Epidemiol.* 2020; 189(7): 671-673.
519. Slomovitz, B et al. Asbestos and Ovarian Cancer: Examining the Historical Evidence. *Int J Gynecol Cancer* 2021; 31: 122-128.
520. Tanha, Kiarash et al. Investigation on Factors Associated with Ovarian Cancer: An Umbrella Review of Systematic Review and Meta-Analyses. *Journal of Ovarian Research* 2021; 14: 153.
521. Tran, T and Egilman, D. Response to Micha et al. (2022) Talc Powder and Ovarian Cancer: What is the Evidence? *Archives of Gynecology and Obstetrics* December 2022.
522. Vidican, P et al. Frequency of Asbestos Exposure and Histological Subtype of Ovarian Carcinoma. *Int J Environ Res Public Health* 2022; 19 (5383).
523. Walsh, T et al. Mutations in 12 Genes for Inherited Ovarian, Fallopian Tube and Peritoneal Carcinoma Identified by Massively Parallel Sequencing. *PNAS* November 1, 2011. 108 (44).
524. Wentzensen, N and O'Brien, K. Talc, Body Powder, and Ovarian Cancer: A summary of the Epidemiologic Evidence. *Gynecologic Oncology* July 2021. <https://doi.org/10.1016/j.ygyno.2021.07.032>
525. Woolen S, Lazar, A and Smith-Bindman, R. Association Between the Frequent Use of Perineal Talcum Powder Products and Ovarian Cancer: A Systematic Review and Meta-Analysis. *J Gen Intern Med* 2022.
526. Woolen S, Lazar, A and Smith-Bindman, R. Association Between the Frequent Use of Perineal Talcum Powder Products and Ovarian Cancer. Supplemental Content Online.
527. Yin, YS and Liu, HY. The Asbestos Contamination of Body Powder and Its Effect on Ovarian Health. February 4, 2022. <https://doi.org/10.21203/rs.3.rs-1237040/v1>.
528. American Cancer Society. Cancer Facts and Figures 2023.
529. Harper AK, Wang X, Fan R, Kirsch Mangu T, Fletcher NM, Morris RT, et al. Talcum Powder Induces Malignant Transformation in Normal Human Primary Ovarian Epithelial Cells. *Minerva Obstet Gynecol* 2023;75:150-7.
530. Kim S., et al. Asbestos Exposure and Ovarian Cancer: A Meta Analysis. *Safety and Health at Work* 2023.
531. Turati F., et al. Occupational Asbestos Exposure and Ovarian Cancer: Updated Systematic Review. *Occupational Medicine* 2023.
532. O'Brien KM et al. Intimate Care Products and Incidence of Hormone-Related Cancers: A Quantitative Bias Analysis. *J Clin Oncol* 00:1-15 (2024).
533. Sanchez-Prieto M et al. Etiopathogenesis of Ovarian Cancer. An Inflamm-aging Entity? *Gyn Onc Reports* 42 (2022) 101018.
534. Harris H et al. Epidemiologic Methods to Advance Our Understanding of Ovarian Cancer Risk. *J Clin Oncol* 00:1-3 (2024).
535. Hagelund N. Study Finds Association Between Genital Talc Use and Increased Risk of Ovarian Cancer. *Am Soc of Clin Onc, ASCO Perspective*, May 15, 2024. <https://society.asco.org/about-asco/press-center/news-releases/study-finds-association-between-genital-talc-use-and-increased>

Daniel Clarke-Pearson, M.D.

Materials Considered

**Company Documents**

1. IMERYS 088907
2. IMERYS 210136
3. IMERYS048311
4. IMERYS051370
5. IMERYS053387
6. IMERYS088907
7. IMERYS090653
8. IMERYS094601
9. IMERYS098115
10. IMERYS105215
11. IMERYS137677/P-594
12. IMERYS210136
13. IMERYS210729
14. IMERYS219720
15. IMERYS230366
16. IMERYS241866
17. IMERYS245144/P-659
18. IMERYS248877
19. IMERYS255101
20. IMERYS255224
21. IMERYS255384
22. IMERYS255394
23. IMERYS255395
24. IMERYS279884
25. IMERYS279968
26. IMERYS281335
27. IMERYS281776
28. IMERYS284935
29. IMERYS304036
30. IMERYS304036
31. IMERYS324700
32. IMERYS342524
33. IMERYS406170
34. IMERYS422289
35. IMERYS467511
36. IMERYS-A\_0011817
37. IMERYS-A\_0015663
38. IMERYS-A\_0024548
39. J&J S2s and BP Product Analysis (1972)
40. JANSSEN-000001/P-22
41. JANSSEN-000056/P-23
42. JNJ 000251888
43. JNJ000000704/P-396
44. JNJ000011150
45. JNJ000016645

Daniel Clarke-Pearson, M.D.

Materials Considered

46. JNJ000019415  
47. JNJ000026987  
48. JNJ000030027  
49. JNJ000062359  
50. JNJ000062436  
51. JNJ000063951  
52. JNJ000064544  
53. JNJ000064762  
54. JNJ000065264  
55. JNJ000065601  
56. JNJ000087166  
57. JNJ000087710  
58. JNJ000087716  
59. JNJ000089413  
60. JNJ000231422  
61. JNJ000232996  
62. JNJ000236810  
63. JNJ000237076  
64. JNJ000238021  
65. JNJ000245002  
66. JNJ000245678  
67. JNJ000245762  
68. JNJ000246467  
69. JNJ000247375  
70. JNJ000251888  
71. JNJ000260570  
72. JNJ000260697  
73. JNJ000260709  
74. JNJ000261010  
75. JNJ000264743  
76. JNJ000265171  
77. JNJ000265536  
78. JNJ000277941  
79. JNJ000279507  
80. JNJ000314315  
81. JNJ000314406  
82. JNJ000347962  
83. JNJ000348778  
84. JNJ000381995  
85. JNJ000404860  
86. JNJ000460665  
87. JNJ000521616  
88. JNJ000526750  
89. JNJ000025132  
90. JNJ000046293  
91. JNJ000260700  
92. JNJAZ55\_000000577

Daniel Clarke-Pearson, M.D.

Materials Considered

93. JNJAZ55\_000000905
94. JNJAZ55\_000004563
95. JNJAZ55\_000006341
96. JNJAZ55\_000008177
97. JNJL61\_000014431
98. JNJMX68\_000003728
99. JNJMX68\_000012858
100. JNJMX68\_000013019
101. JNJMX68\_000013945
102. JNJMX68\_000017827
103. JNJNL61\_000079334
104. LUZ013094/P-26
105. P-321
106. P-47
107. PCPC\_MDL00062175
108. PCPC0075758
109. RJLEE-001497
110. WCD 002478 - Exhibit 32 Waldstreicher
111. Pltf\_MISC\_00000272 (JANSSEN-000001-19) 1962.
112. RA00461
113. RA00462
114. RA00469-70
115. RA00471-72
116. RA00473
117. RA00474
118. RA00475
119. RA00476
120. RA00477-78
121. JNJTALC001465273

### **Other Materials**

3<sup>rd</sup> Supplemental MDL Report of William Longo, PhD – Analysis of Non-Historical J&J’s Talcum Powder Consumer Product Containers and J&J Chinese Historical Talc Retain Samples, dated November 17, 2023.

William E. Longo, PhD – MDL Johnson’s Baby Powder Application and Exposure Container Calculations for Six Ovarian Cancer Victims Bellwether Cases, dated November 17, 2023.

Amended Expert Report of Shawn Levy, PhD, dated November 15, 2023.

**Case-Specific  
Depositions**

Deposition of Pasqualina Rausa, dated 1/27/2021  
Deposition of Joseph Rausa, dated 5/12/2021  
Deposition of Daniel Rausa, dated 4/26/2021  
Deposition of Nicholas Rausa, dated 5/11/2021  
Deposition of Gerardo Colon-Otero, M.D., dated 3/2/2021  
Deposition of Daniel L. Clarke-Pearson, M.D., dated 08/26/2021  
Deposition of Daniel L. Clarke-Pearson, M.D., dated 08/27/2021

**Plaintiff Profile Form**

Plaintiff Profile Form for Pasqualina Rausa

**Medical Billing (Defense)**

RausaP-CSNF-00001-00003  
RausaP-MCPB-00001-00044  
RausaP-GSHPB-00001-00005  
RausaP-MHPB-00001-00006  
RausaP-MHPB-00007-00015  
RausaP-BSHSIPB-00001-00004  
RausaP-CRHLLPPB-00001-00006  
RausaP-CancerSpecialistsofNorthFloridaPB-00001-00029  
RausaP-AMGSVPCPB-00001-00015  
RausaP-AMGSVPCPB-00016-00019  
(Duplicate)RausaP-CMAPB-00001-00038  
RausaP-DUHSPB-00001-00007  
RausaP-MCOPB-00001-00046  
RausaP-SSAPB-00001-00003  
RausaP-SSAPB-00004-00007  
RausaP-SVMCPB-00001  
RausaP-SVMCPB-00002-00014  
RausaP-SVOBGYNB-00001-00006

**Medical Records  
(Defense)**

RausaP-GeneDxMr-00001-00021  
RausaP-SVMCSRad-00007-00013

RausaP-AscensnMedGrpStVincentPrimCareMR-00001-00003  
RausaP-CMAMR-00001-00118  
RausaP-CrystalRunHealthcareLLPMR-00001-00009  
RausaP-CrystalRunHealthcareLLPPath-00001-00005 (NRS)  
RausaP-DukeUnvrstyHlthSystmRad-00001 (NRS)  
RausaP-MemorialHospitalPath-00001-00004 (NRS)  
RausaP-MemorialHospMR-00001-00149  
RausaP-SVMCSRAd-00001-00006  
RausaP-AscensnMedGrpStVincentPrimCareMR-00004-00075  
RausaP-MayoClinicRad-00001-00002  
RausaP-SVMCSPath-00001-00003  
RausaP-CRHLLPPath-00001-00005 (NRS)  
RausaP-AMGSVPCMR-00004-00075  
RausaP-CRHLLPMR-00001-00009  
RausaP-MCOMR-00001-00009  
RausaP-CSNF-00001-00003  
RausaP-AMGSVPCMR-00001-00003  
RausaP-CSNF-00004-00024  
RausaP-MCRad-00001-00002  
RausaP-BSHSIMR-00001-00057  
RausaP-BSHSIMR-00058-00065  
RausaP-CSNFMER-00001-00064  
RausaP-GSHPath-00001-00004  
RausaP-DUHSMR-00014-00016  
RausaP-HostinH-00001-00018  
RausaP-CRHLLPRAD-00001-00008  
RausaP-DUHSMR-00001-00013  
RausaP-GenPathMR-00001-00013  
RausaP-MCMR-00010-00092  
RausaP-MCMR-00001-00009  
RausaP-PPCO-00001-00008  
RausaP-SVMCRMER-00001-00073  
RausaP-SSAMR-00013-00014  
RausaP-SSAMR-00001-00012  
RausaP-SSAMR-00015  
RausaP-SVMCSMR-00001-01199  
RausaP-SVMCRMER-00074-00080  
RausaP-SVMCRPath-00001-00025  
RausaP-SVOBGYNMRE-00001-00040  
RausaP-SVOBGYNMRE-00041-00043  
RausaP-GSHRad-00001-00004  
RausaP-MCOMR-00010-00545

**Medical Billing**  
**(Plaintiff)**

PRAUSAPL-AMGBILL-000001-000011  
PRAUSAPL-CRHBILL-000001  
PRAUSAPL-CRHWNBILL-000001  
PRAUSAPL-DRHOSTINBILL-000001  
PRAUSAPL-MAYOCBILL-000001-000012  
PRAUSAPL-WGOBILLNRS-000001-000002  
PRAUSAPL-CSNFLBILL000001-000007  
PRAUSAPL-MAYOCBILL-00013

**Medical Records**  
**(Plaintiff)**

PRAUSAPL-AMG-000001-000038  
PRAUSAPL-AMGNRS-000001-000002  
PRAUSAPL-AMGSVPC-000001-000066  
PRAUSAPL-CMA-000001-000117  
PRAUSAPL-CRH-000001  
PRAUSAPL-CRHWN-000001-000003  
PRAUSAPL-DH-000001-000012  
PRAUSAPL-DH-000013-000028  
PRAUSAPL-DRBASHIR-000001-000083  
PRAUSAPL-DREDWARDS-000001-000967  
PRAUSAPL-DRHOSTIN-000001-000011  
PRAUSAPL-DRHOUSE-000001-000120  
PRAUSAPL-DRVENTRUDONRS-000001  
PRAUSAPL-MAYOC-000001-000091  
PRAUSAPL-MCRO-000001-001126  
PRAUSAPL-SVRHBLOCK-000001  
PRAUSAPL-SVSHPATH-000001-000021  
PRAUSAPL-SVRHPATH-000022-000028  
PRAUSAPL-SVSHNRS-000001-000004  
RAUSAPPL-CSNFLSP-000001-000114  
PRAUSAPL-000125-000151  
PRAUSAPL-000027-0000124  
PRAUSAPL-000010-000026  
PRAUSAPL-000007-000009  
PRAUSAPL-000001-000006  
PRAUSAPL-MAYOC-000092-000591  
PRAUSAPL-MAYOC-000592-001091  
PRAUSAPL-MAYOC-001092-001591  
PRAUSAPL-MAYOC-001592-002091  
PRAUSAPL-MAYOC-002092-002591  
PRAUSAPL-MAYOC-002592-003091  
PRAUSAPL-MAYOC-003092-003610  
PRAUSAPL-MAYOC-003611-00364

**Other Documents**

Expert Report of John J. Godleski, M.D., dated June 21, 2021.

# Exhibit C

**Daniel Clarke-Pearson, MD**  
**Medical Legal Testimony in last 5 years**

Date: January 7, 2019

Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Product Liability  
Litigation MDL No. 2738

March 27, 2020

Khan v. Karl Storz, Howard Jones, Noh Goodman, Valley Health System  
SUPERIOR COURT OF NEW JERSEY  
2 LAW DIVISION - ESSEX COUNTY

March 9, 2021

Case: Ruscitto v. Jones

Date: September 13, 2021 and September 14, 2021

Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Product Liability  
Litigation MDL No. 2738

Date: January 17, 2024 and March 8, 2024

Johnson & Johnson Talcum Powder Products Marketing, Sales Practices and Product Liability  
Litigation MDL No. 2738

Hourly Rate: \$900/hour

# **EXHIBIT 22**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY

IN RE: JOHNSON & JOHNSON  
TALCUM POWDER PRODUCTS  
MARKETING, SALES PRACTICES,  
AND PRODUCTS LIABILITY LITIGATION

MDL No. 16-2738 (FLW)(LHG)

THIS DOCUMENT RELATES TO:

ANNA GALLARDO,

)

)

)

Plaintiffs,

)Case No. 3:18-cv-10840

v.

)

)

JOHNSON & JOHNSON, et al.,

)

)

Defendants.

)

TUESDAY, JANUARY 12, 2021

Remote Oral Deposition of ANNA GALLARDO, taken pursuant to notice and conducted at the location of the witness in the State of Missouri, commencing at 8:30 a.m. Central Time, on the above date, before Jennifer A. Dunn, Registered Professional Reporter, Certified Court Reporter.

GOLKOW LITIGATION SERVICES  
877.370.3377 ph | 917.591.5672 fax  
deps@golkow.com

1 googled Johnson's Baby Powder advertising or anything like  
2 that?

3 A No, I did not.

4 Q Do you keep a file in connection with this  
5 lawsuit?

6 A Just whatever papers I have. This is the only  
7 file that I have.

8 Q All right. And apart from anything that was sent  
9 to you by your lawyers, do you -- what -- what is -- I -- I  
10 don't need to know anything that your lawyers have sent you,  
11 but other than that, what is contained in your file that  
12 relates to this lawsuit?

13 A Nothing, I really don't have a file. Whatever  
14 they sent me, which is what I just told you is all I have.

15 Q All right. Got it.

16 Do you have in your possession any bottles of  
17 Johnson's Baby Powder?

18 A No.

19 Q Do you have in your possess any bottles of  
20 Johnson's Shower to Shower?

21 A No.

22 Q When is the last time that you had in your  
23 possession any bottles of Johnson's Baby Powder?

24 A Probably the last time that I used it, which is  
25 around 1988.

1 not have Johnson's Baby Powder in your home?

2 A I -- I think -- I'm -- I can't remember if we had  
3 it in our home or not.

4 Q Do you remember when in 1988 you stopped using  
5 Johnson's Baby Powder?

6 A No, I just remember it was around 1988.

7 Q So your son would have been about 10 or 11?

8 A 10 or 11 years old, mm-hmm.

9 Q And when you stopped using Johnson's Baby Powder,  
10 did you replace talc usage in your genital area with any  
11 other product?

12 A No, I didn't use anything. I decided that I  
13 wasn't going to use anything.

14 Q Did you have any concerns at the time that you  
15 stopped using Johnson's Baby Powder?

16 A No. No, none at all.

17 Q Did you talk to anyone about stopping your use of  
18 Johnson's Baby Powder?

19 A No.

20 Q You didn't have any conversations about the fact  
21 you weren't going to use Johnson's Baby Powder anymore?

22 A No, no conversations.

23 Q Have you ever told anyone not to use Johnson's  
24 Baby Powder?

25 A No.

1 Q So you're a life-long St. Louis resident; is that  
2 correct?

3 A That's correct.

4 Q And when you were growing up and you went to high  
5 school in the city, were you also living in the city?

6 A Yes.

7 Q Where did you live growing up?

8 A On [REDACTED].

9 Q Is the high school that you went to still there?

10 A It's not called Laboure anymore, but the building  
11 is still there.

12 Q What is it called now?

13 A I think it's called Cardinal Institute. It was, I  
14 don't know if it still is.

15 Q So were you actually downtown St. Louis growing  
16 up?

17 A No, no, I was in North St. Louis City.

18 Q And while you were growing up, who lived in your  
19 residence with you?

20 A My mother and father and my sister.

21 Q And your sister's name is?

22 A Patricia Opie, O-P-I-E.

23 Q Thank you. Anyone else ever live with you while  
24 you were growing up?

25 A No.

1 effects?

2 MS. MCGRODER: Object to the form.

3 THE WITNESS: That's exactly right, yes.

4 BY MS. GARBER:

5 Q In other words, the risks were not worth it to  
6 you?

7 A Not at all.

8 MS. MCGRODER: Object to form. Leading.

9 BY MS. GARBER:

10 Q I want to speak to you about Johnson's Baby Powder  
11 for a bit.

12 Why did you specifically buy Johnson & Johnson's  
13 Baby Powder as opposed to other brands?

14 A I trusted Johnson & Johnson. I would look at  
15 their ads, they would talk about it being effective and  
16 safe. Again, I liked the smell of it for, you know, for  
17 hygiene. And I thought it was a good brand.

18 I never really ever did generic branding, I  
19 always, you know, used the label. The label was important  
20 to me and the company that I trusted.

21 Q Counsel asked you about the bottle of Johnson's  
22 Baby Powder. Did you ever read the print on the back of the  
23 bottle?

24 A Yes, I would occasionally look at the print on the  
25 back of the bottle, yes.

# **EXHIBIT 23**

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY

- - -

IN RE: JOHNSON & JOHNSON :  
TALCUM POWDER PRODUCTS :  
MARKETING, SALES PRACTICES, :  
AND PRODUCTS LIABILITY :  
LITIGATION :  
THIS DOCUMENT RELATES TO: : MDL No. 16-2738  
: (FLW) (LHG)  
HILARY CONVERSE, et al., :  
Plaintiff, : Case No. 3:18-cv-  
v. : 17586-FLW-LHG  
JOHNSON & JOHNSON, et al., :  
Defendants. :

- - -

DECEMBER 1, 2020

- - -

Remote Oral Deposition,  
taken via Zoom, of HILARY CONVERSE,  
commencing at 10:14 a.m., on the above  
date, before Amanda Maslynsky-Miller,  
Realtime Reporter and Certified Court  
Reporter for the State of New Jersey.

- - -

GOLKOW LITIGATION SERVICES  
877.370.3377 ph | 917.591.5672 fax  
deps@golkow.com

1                   What was the cause of death,  
2    if you know?

3           A.    [REDACTED].

4           Q.    How old is your daughter?

5           A.    47.

6           Q.    What is her name?

7           A.    Jessica.

8           Q.    And where does Jessica live?

9           A.    She lives in Prospect,  
10   Connecticut. Same town as where we live.

11          Q.    Does she have any major  
12   health issues?

13          A.    No.

14          Q.    And what was your son's  
15   name?

16          A.    Joshua.

17          Q.    Joshua's last name was  
18   Converse?

19          A.    Converse, yes.

20          Q.    What is Jessica's last name?

21          A.    Hughes, H-U-G-H-E-S.

22          Q.    Does Jessica work?

23          A.    Yes, she does.

24          Q.    What does she do?

1 Q. When did you -- at what age  
2 were you when you started using Johnson's  
3 baby powder?

4 A. 14.

5 Q. Can you describe for me the  
6 container of the Johnson's baby powder  
7 that you would generally use?

8 MS. GARBER: Object to the  
9 form.

10 THE WITNESS: All I remember  
11 was a white bottle with, I  
12 believe, some blue writing and  
13 maybe some pink on the bottle.

14 BY MS. MIMS:

15 Q. How often would you apply  
16 Johnson's baby powder?

17 A. If [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

22 If [REDACTED],

23 [REDACTED]

[REDACTED]. You know, I didn't keep

# **EXHIBIT 24**

1 UNITED STATES DISTRICT COURT  
2 FOR THE DISTRICT OF NEW JERSEY

3 IN RE: JOHNSON & JOHNSON | MDL No. 16-2738 (FLW)(LHG)  
TALCUM POWDER PRODUCTS |  
4 MARKETING, SALES PRACTICES, |  
AND PRODUCTS LIABILITY |  
5 LITIGATION

6 This Document Relates to: |

| Case No. 3:19-cv-14366-FLW-LHG

7 LYNDA BONDURANT and STEVEN |  
BONDURANT, |

8 Plaintiffs, |

9 v. |

10 JOHNSON & JOHNSON, et al., |

11 Defendants.

12 - - -  
13 Thursday, March 18, 2021  
14 - - -

15 This is the Remote Deposition of JAMIE  
16 BIANCA MILLER, commencing at 1:15 p.m. Eastern Time,  
17 on the above date, before Susan D. Wasilewski,  
18 Registered Professional Reporter, Certified Realtime  
19 Reporter, Certified Manager of Reporting Services,  
20 Certified Realtime Captioner, and Florida  
21 Professional Reporter.

22 - - -  
23 GOLKOW LITIGATION SERVICES

24 877.370.3377 ph | 917.591.5672 fax

25 deps@golkow.com

1           A.     No, ma'am.  Someone is knocking at my door,  
2     but there is somebody else here to answer it.

3           Q.     Okay.

4           A.     It's just a delivery.  I apologize.

5           Q.     No, that's fine.

6           A.     Okay.  We're good.

7           Q.     So we prepare these Plaintiff Profile Forms  
8     in this litigation, and it's some basic questions  
9     that your mother would have likely gone over and  
10    provided answers to counsel.

11                   And based on your prior response, it sounds  
12    like you have never looked at these different  
13    documents?

14           A.     I have not.

15           Q.     Okay.  And you haven't discussed any of that  
16    with your mother before she passed; is that right?

17           A.     I think that I told her I saw a commercial  
18    and asked her about it maybe.  Maybe we had a  
19    conversation right after her diagnosis.  However, I  
20    was surprised to find out that Mom had taken legal  
21    action and tried to pursue it.  She didn't tell me  
22    anything.

23           Q.     Okay.  And had she told any of your other  
24    siblings?

25           A.     I don't believe so.